

”I liked the Idea of Including”

Negotiating knowledge and meaning in conversations about visual impairment and inclusion in Special needs Education, with videobased teaching material as a learning resource. A discourse analytical approach.

Gunn Siri Randem



Master thesis

Department of Special Needs Education

Faculty of Education

UNIVERSITY OF OSLO

8. mai 2007

Abstract

The goal of this master thesis is to explore conversations about inclusion and visual impairment in higher education from the following research question:” How do international master students in Special Needs Education at the University of Oslo negotiate knowledge and meaning in group conversations when using a video based (DVD) learning material is used as a learning resource, what is negotiated and what may explain the interaction process?” The learning material is being developed at the University of Oslo, Department of Special Needs Education. The theoretical basis of this research lies within the frames of socio-cultural and social-constructive perspectives. The participants in the study are 16 students who participate in group discussions. The research material consists of data from several conversations, where they are considered a unity within the case. Methodologically therefore, this empirical research is designed as an embedded single case study. Discourse analysis is the chosen methodological tool and theoretical framework for analysing the conversations as a text. Discourses are different aspects of reality (socially constructed knowledges) that are represented and realised in ways of thinking, social processes and speech acts. The practical method of analysis is specifically constructed for the purpose of this research. It is based upon transcribed data from the videotaped conversations. How the students negotiate and develop knowledge during their conversations is studied with the aid of Discourse Analysis. This is then discussed in relation to discursive practices and broader social and cultural contexts. The field of Special Needs Education and the views on inclusion and visual impairment are influenced by societal, cultural, global and local ideologies and discourses. Political views on theories of learning also influence discursive practice. The results of this study show that the DVD-based learning material made possible for the students to establish and negotiate “common ground”; a joint contextual and situational platform of understanding. The results of the analysis show that the negotiation in the conversations entails agreement, non-agreement, understanding concepts and language, ideological understanding and discursive content of meaning in addition to discussions on cultural similarities and differences. Norms of politeness probably ensures that non-agreement does not lead to conflict in cases

where agreement is not reached. The analysis shows that the students overcame differences in language, culture and discourse through negotiating knowledge and meaning. The students' backgrounds are different in matter of discourse systems and representations of reality. Sharing these with the others probably helped enriching and stimulating discursive learning processes. Even though the students had different personal experiences and background, the learning material gave the students a joint frame of reference that could be discussed. The students negotiated about what was "seen" both from the work sheets that were handed out and from individually initiated topics. From a constructivist point of view it is possible that the students constructed joint knowledge through sharing discourses that are culturally founded and through reflection, in opposition to the production of what may be called "school" knowledge. The students thus generated their own learning context with the use of the DVD-material. The use of the learning material possibly added motivation to the learning process. A tentative conclusion may be that the DVD-material may stimulate cooperation and reflection in conversations in Teacher Education, given the terms and premises within social constructive learning theory and in the light of experiences of the use of technology in higher education. Visual representation of a practice close to "real life" (realistic settings), the prospect of working and reflecting together give the users of the learning material the possibility of a rich presentation and sharing of their own discourses of knowledge. This supports a multicultural and multi-voiced learning context. A tentative conclusion based on analytical generalisation is that the audiovisual video – and work sheet based learning material possibly may enrich the conversations and learning contexts in similar settings. In the further development of the learning material, the need for specific, subject related knowledge (i.e. facts) must be weighed against the need for such tasks that promote reflective and meta-cognitive competence. Specific research questions may be how students' understanding may be connected to the way questions are asked, whether the questions are open or closed or which words, terms and discourses the learning material convey. It may be a further idea to study the DVD material as a multimodal pedagogical text.

Foreword to the English Edition

An English edition of this master thesis was promised as a feedback of information to the international master students come winter 2007/2008. I am happy to be able to present it here, albeit somewhat belatedly due to the author's severe illness and hospitalization part of this past year.

In the period of time that has passed since the Norwegian edition was published, the main research project from which the learning resource *Teachers for all* sprung has moved on, so to speak; it has been developed further and it has been implemented in other groups of students in higher education in Norway, Uganda and Kenya. The learning resource has likewise been subject to further research by the Research group at Department of Special Needs Education, Faculty of Education, University of Oslo Design and *Learning Environments in Teacher Education for Inclusion*. Certain aspects of what this master thesis presents may therefore seem "familiar" to those that are into this field of interest already. Discourse analysis was, however, new as a theoretical and methodical approach in the field of Special Needs Education in Norway in 2007, when this thesis was first published.

I have embarked on the task of translating my thesis quite boldly, given my background as a former student of the English language at the University of Oslo, a former English teacher and having lived for a while in the United States of America. I must however also humbly admit that any mistakes are my own. I have stayed close to the Norwegian text in this translation, but no translation can be made word by word. In translation therefore, some aspects of meaning may get lost. Where any discrepancy in thought and presentation must occur because of the differences in the two languages, I have tried to present and to keep intact the content of meaning in each chapter and in the thesis as a whole.

On a practical note, due to the use of End Note in referencing, the reference list here is kept as in the Norwegian edition.

I hope this translation of my master thesis from Norwegian into English may be

sufficient as a small “springboard” of inspiration for further research in this interesting field of study, perhaps especially for the contingency of international master students at the University of Oslo.

Gunn Siri Randem, The University of Oslo, fall 2008

Foreword

"The speaker buries his meaning; it is for the hearer to dig it up again; and all speech, written or spoken, is in a dead language until it finds a willing and prepared hearer", Robert Louis Stevenson (1850-1894) "Reflections and Remarks on Human Life" (1878: Section 3).

To "say something" is a practical action which means to actively establish meaning in relation to the setting and context you are participating in. In this master thesis I have tried to gain understanding from what is spoken in conversations between students. Basis for the research are videotaped conversations: not to find out what happens behind each person's personal "curtain", but rather to view the "tableau" that presents itself when people talk together. This means that I have not been searching for the participants' motives, interests or goals, but rather how they together, and jointly, construct their conversations and negotiate knowledge and meaning within an institutional setting. This master thesis is written from a similar basis of understanding; it is written on the basis of an activation of meaning made specifically for this given research setting. Robert Yin puts it like this: "...every project has its own context and perspective." (Yin 2003:70). This project had not been feasible without the context that was given by the University of Oslo, Department of Special Needs Education. I would like to thank project leader and Associate Professor Siri Wormnæs warmly, for letting me become a small part of the larger project called "Teachers for all", developing learning material for teacher education. I want to thank her for giving me information at the right times and for the practical arrangements that were necessary for me to be able to carry through this master project. This master project had not been possible without her. This master thesis would not have come into existence without the students at the international master program in Special Needs Education at the University of Oslo either. They were my informants in this study, and I would like to thank them profoundly for allowing me, and meeting me in such a positive way, to let me enter and videotape their conversations as well as allowing me to use the material in my thesis. I would also like to thank my counselor, Einar Sletmo, for inspiring talks and his inestimable knowledge in a field of special

needs education which I before writing this master thesis only knew on a relatively general basis; that is visual impairment. As an educated teacher of audio pedagogy, my active discursive knowledge lay partly in other areas than were discussed in these videotaped conversations. The topics of visual impairments and inclusion were imbedded in the focus of the audio visual learning resource and the exercises presented to the students. During the period of time that this study took place the students had just recently been presented with the theoretical basis of visual impairment and inclusion. They had already been introduced to the knowledges and the discursive fields that this thesis entails. The introduction of the term discursive field at this point brings us to the reasoning for making a discourse analysis. The idea to write a master thesis based on a discourse analytical approach came occurred to me through another field of study that I am engaged in; the master program in Educational texts, design and learning at Vestfold University College. Through this I have gained theoretical and practical knowledge that has enriched my present work with the master thesis in Special needs Education. Even if I had not made a large analysis of discourse prior to this thesis, I had the experience of making 8-10 analyses of different kinds of texts as project assignments (with qualified counselling) consisting of 5-10 pages each. This gave valuable practice and experiences that I could use directly throughout this master study. During the work with this material, and with a reference to the initial quote by R.L Stephenson in this chapter, I have had to listen to my own text in a way that has made it come alive in my mind. Still, the work has been challenging, both in thought and practice.”Speech is conveniently located midway between thought and action, where it often substitutes for both”, says John Andrew Holmes (b.1874) in ”Wisdom in Small Doses” from 1927. If you substitute the word ”speech” in this quote by the words ”the master thesis”, you may get a fairly accurate picture on how I experienced writing it; as sitting somewhere right between thought and action.

Gunn Siri Randem, the University of Oslo, spring 2007

Content

ABSTRACT.....	3
FOREWORD TO THE ENGLISH EDITION.....	5
FOREWORD	7
CONTENT.....	9
1. INTRODUCTION: CONVERSATION AND TECHNOLOGY IN EDUCATION	12
1.1 BACKGROUND, SUBJECT AND OBJECTIVES	13
1.2 FOCUS, PREMISES AND BOUNDARIES	15
1.2.1 <i>The starting point: An invitation from the Department of Special Needs Educacion</i> .	17
1.2.2 <i>About the learning resource TFA.....</i>	18
1.3 APPROACHES TO AND LIMITATIONS OF DISCOURSE ANALYSIS.....	19
1.4 DEFINING THE MAIN RESEARCH QUESTIONS	22
1.5 THE STRUCTURE OF THE THESIS: A SHORT READING MANUAL.....	24
2. THEORY: DISCOURSE ANALYSIS – AN OVERVIEW	26
2.1 DISCOURSE ANALYSIS AS A THEORETICAL DICIPLINE	26
2.2 UNDERSTANDING DISCOURSE ANALYSIS: LANGUAGE IN JOINT INTERACTION.....	28
2.2.1 <i>Social constructivism and philosophy of language: Language as interaction and negotiation</i>	29
2.2.2 <i>Conversation as a collective process and coordination.....</i>	32
2.2.3 <i>Conversation in a dialogic perspective: adressivity and responsivity</i>	34
2.2.4 <i>Conversation as a pragmatic way of building meaning and learning</i>	36
2.2.5 <i>Mantovani’s model: The use of tools in a social context</i>	38
2.3 TECHNOLOGICAL LEARNING DESIGNS IN EDUCATION.....	39
3. METHOD: DESIGN AND STRATEGY	42
3.1 A CHOICE OF METHOD AND DESIGN	42

3.1.1	<i>About discourse analysis as a strategy for analyzing data</i>	43
3.1.2	<i>Norman Fairclough's model of discourse analysis</i>	44
3.1.3	<i>A practical approach to discourse analysis</i>	45
3.2	ABOUT THE RESEARCH PROCESS.....	46
3.3	COLLECTING DATA FOR ANALYSIS	47
3.3.1	<i>About the use of video for collecting data</i>	47
3.3.2	<i>About transcription as a tool</i>	48
3.3.3	<i>About the analysis of speech</i>	49
3.4	CREDIBILITY, RELIABILITY AND VALIDITY IN THE CASE-STUDY	50
3.5	RELEVANCE AND ANALYTICAL GENERALIZATION	52
3.6	PERSPECTIVES ON ETHICS.....	53
4.	EMPIRICAL DATA: A DISCOURSE ANALYSIS OF EMPIRICAL DATA	55
4.1	TEXT ANALYSIS OF CONVERSATIONAL SEQUENCES	55
4.1.1	<i>How is knowledge and meaning negotiated?</i>	56
4.1.2	<i>"The White Cane" Text extract 1</i>	56
4.1.3	<i>"I liked the idea of including" Text extract 2</i>	61
4.1.4	<i>"Uneven Gender Distribution" Text extraction 3</i>	64
4.1.5	<i>What kind of negotiation happens in the conversations?</i>	65
4.2	THE CONVERSATIONS SEEN IN THE LIGHT OF SITUATIONAL CONTEXT AND DISCURSIVE PRACTICE: EXPLANATIONS.....	73
4.2.1	<i>Situational context and "the event of the moment"</i>	74
4.2.2	<i>Socializing into discourses and opportunities of change</i>	75
4.2.3	<i>Inclusion as a field of discourse — a world of differences</i>	77
4.2.4	<i>Visual impairment as a field of discourse</i>	80
4.3	THE CONVERSATIONS SEEN IN RELATION TO THE USE OF TECHNOLOGY IN A SOCIO CULTURAL CONTEXT	

82	
4.3.1	<i>Collective sharing of knowledge and technology</i>82
4.3.1	<i>Technologic learning material: Potential power and effect on learning</i>83
5.	CONCLUSION: SUMMARY AND CONCLUSIONS 88
5.1	SUMMARY, EVALUATION AND TENTATIVE INFERENCES88
5.2	META-REFLECTION: A CRITICAL VIEW AND ROADS AHEAD91
KILDELISTE93
VEDLEGG101
VEDLEGG 1,	GAIL JEFFERSONS PRINSIPPER FOR NOTASJON101
VEDLEGG 2,	FIGUR 1: GUISEPPE MANTOVANIS MODELL102
VEDLEGG 3,	FIGUR 2: NORMAN FAIRCLOUGHS MODELL.....103

1. Introduction: Conversation and technology in education

"...human beings travel the indirect path from the world to themselves and from themselves to the world through conversation with another person." Michael Cole¹ (1996:123).

In a socio-cultural perspective² conversations are based on interaction processes that establish the development and construction of knowledge. This master thesis is about negotiating knowledge and meaning in conversations about visual impairment and inclusion in special needs education, with a video- and discussion based learning material as a learning resource. The learning material is being developed at the University of Oslo, the Department of Special Needs Education.

The term knowledge is viewed here as a broad term, where human knowledge building and development may be seen as a question of learning different discourses³ (Säljö 1999).

This Master thesis is basically an exploratory research based on transcribed video tapes. It analyzes how students at the international master program in Special Needs Education at the University of Oslo negotiate joint knowledge and understanding within the field of special needs education. The study examines what is negotiated, how the negotiation takes place and what may explain the interaction process. The thesis seeks to explain how conversation and the use of learning technology in higher education (teacher education) may give the participants an opportunity to negotiate

¹ Michael Cole has used traditions in Russian historical cultural activity theory and American pragmatic social science to build a "meditational theory of mind" which weaves culture, context and activity together with cognitive development Cole, M (1996) *Cultural Psychology: A Once and Future Discipline*, Harvard University Press.

² The socio-cultural perspective states that knowledge is constructed through interaction within cultural communities of practice. The perspective is influenced by the Russian psychologist Lev Vygotsky (Wertsch m.fl. 1995) as has been developed through several approaches of research, among others are cultural psychology and activity theory (Leont'ev 1981, Cole 1996, Engeström 1987) distributed cognition (G. Salomon 1993, Hutchins 1995) and a situated perspective on learning (Lave and Wenger 1991, Mantovani 1996). Learning is perceived as an active process where the learner constantly construct and reconstruct knowledge, skills and inter-subjective understanding through actions, discursive practice and different socialization processes.

³ Discourses may be understood as concepts and ways of thinking that are rooted in, written into and give form to social actions; see chapter 1.3 for a theoretical discussion of the term.

meaning and knowledge by establishing a mutual and joint platform of understanding, and what may explain the discursive interaction process.

This introductory chapter will give an outline of the thematic background, objectives and premises as well as a short description of the area of research and research questions. A presentation and discussion of the concept of the term discourse is then given before an overview of the structure of the master thesis.

1.1 Background, subject and objectives

What kind of learning is advisable in higher education? What kind of social activity and participation gives the right context for learning? These and other main didactic and pedagogical questions have been re-actualized through the development of new information and communication technology (ICT) in the recent years (Ludvigsen og Hoel 2002a, 2002b). In a larger perspective this is a result from changes in higher education that are founded in several of the past decades' global and societal paradigm shifts concerning knowledge and learning (Quortrup 2001, Lyotard 1984, St. meld 27 (2000-2001), Bruffee 1993, Cole 1996).

Within these "shifts" in teaching lies the assumption that digital, technological media create other possibilities for learning than more traditional teaching methods, through interpersonal interactions that may realize newer learning ideals of collaborative learning, critical thinking, and learning through reflection and self regulation among other things. Technological learning materials are viewed as artifacts that can influence different learning processes (Mantovani 1996). A short definition of learning is here the processes where the individual transforms his or her experiences into knowledge, skills, attitudes, values and emotions (Jarvis 1993:180). The way people talk is a part of what is learnt (Mercer 1995, Mercer and Wegerif 1999).

There has been a growing interest in using different types of learning technology in all levels of education, and an increasing faith in the value of technology as a learning resource has been documented (Scardamalia and Bereiter 1994, Grabinger 1996, Laurillard 1993). What is meant here by technological learning resources are both

one- and two-way media that are used to enrich teaching; from interactive information, network and communication systems to different forms of multimedia material. This also entails simulation programs and the use of video (for instance Koschman 1996, Pea 1992a, and Cole 1996).

The evaluation of these kinds of learning materials in terms of use and effect in different learning environments are dependent upon views on learning and theoretical frames of understanding, situational and societal context and discursive practice. A discursive practice is here understood as how utterances, conversations or texts are produced and interpreted (Fairclough 1995). Educational practices constitute core dominions of linguistic and discursive power and are important for the governing of social practices within the educational institutions (Fairclough 1995). Cultural meanings, values, social relations, identities and pedagogies are from this perspective mediated through and within the educational institution's discourses⁴ by means of the media that are used in the educational practices. This is why discourses are interesting as fields of study.

This master thesis springs from a setting where a technological, video- and task based learning material is implemented in an educational system as a part of product development. The ambitions of this work are to shed light on some aspects of conversations both as a negotiation process and a discursive practice in a situation where a technological learning resource is put into use.

The theoretical terms of this thesis is based on the established assumption that systems of language and technology are anchored in socio cultural practice, viewed from a socio-constructive⁵ perspective on language.

⁴ Discourses show aspects of reality that are constructed, represented and realized in socio-cultural processes and practices (Fairclough 2006), as sets of cognition that embraces attitudes, values and ideologies. See chapt. 1.2 and 1.3.

⁵ Social constructivism within psychology and science is based on the belief that humans construct their reality through interaction with others, and this interaction is dependent upon language. Within this belief language is important for constructing reality (Cole 1996, Säljö 2006, Jørgensen og Phillips 2006, Per Linell 1998). Se kap 2.2.1. for utdyping.

This must be understood from an ontological position marked by *critical realism*⁶. An introduction at this point of the concept *perspectives on language* points to the broad relevance of empirical studies of conversations in educational settings. This leads up to the focus, premises and boundaries of this master thesis which now will be presented.

1.2 Focus, premises and boundaries

Roger Säljö (2000:35) states that: "To develop discourses about the environment is one of the most obvious ways through which man collects experiences and interpret reality"⁷. An important component in developing knowledge is creating discourses that puts events, processes and objects in perspective in certain ways (Säljö m.fl. 2001). Discourses⁸ are ways of speaking, writing and thinking according to rules attached to certain social and historical occurrences that are validated both in practical conversational situations but also in a broader meaning as culturally decided ways of thinking (Per Linell 1998). Discourses show aspects of reality that are constructed, represented and realized in socio-cultural processes and practices (Fairclough 2006). This master thesis explores this through the subject of conversations. *Conversations* are here understood as collective processes where the participants alternate between activities, actions, roles, objectives and perspectives. Meaning is extracted and expands through coordination of joint expectations (Clark 1996).

The focus of this study is conversations as they appear in groups of students at the International Master program of Special needs Education at the Department of Special Needs Education at the University of Oslo when a video- and task based learning material (TFA) is taken into use as a learning resource (see chapter 1.2.2).

⁶ Critical realism implies an understanding of social systems, relations and the material world as existing independently - not dependent upon the awareness or knowledge of this in human beings – and yet they are viewed as socially constructed (Fairclough 2006).

⁷ (Translation made by G.S.R)

⁸ See chapter 1. 3 for a discussion on the term discourse and its limitations.

Discourse analysis⁹ is chosen as a methodological tool and as a theoretical framework for the analysis of data. The method of analysis includes a description of the conversational texts, an interpretation of discursive processes and socio cultural processes. The data that forms the empirical basis for the study is collected by two days of videotaping the conversations. The Informants are 16 students from the international master program at the University of Oslo. The students were divided into groups of 2-5 participants. Three conversations from these tapings, consisting of 135 minutes of talk, were chosen and transcribed into text for analysis. A total of 90 minutes of conversation was then chosen as the units of analysis. A transcription based on a simplified "Jeffersonian Transcription Notation" (Jefferson 1984) is used (see attachment 1). The study consists for data from several units of analysis (conversations and sequences) that are seen as a unity. It may therefore be described as an "embedded" single case design (Yin 2003).

The discourse analysis that is presented here is not primarily a summary of topical content in these conversations, and is not a linguistic analysis or an ethnographical¹⁰ interaction analysis. It still contains elements from such analytical methods. So what kind of analysis is shown? To give a simple answer to what is complicated in execution: What is shown here is different aspects of language tied to the negotiation of joint understanding ("common ground" Clark 1996, Scollon and Scollon 2001). This is a pragmatic approach to conversation as text, yet with a sociological edge.

The study is concerned with how negotiation about knowledge and meaning happen within a special needs educational practice. An underlying premise here is that discursive practices both can mirror and actively influence cultural change (Jørgensen and Phillips 2006).

In the article "Meeting with new technology – about learning perspectives and educational politics"¹¹, in SOFF-report nr. 1/2002, Geir Haugsbakk (2002) states that

⁹ See chapter 2 for a theoretical framework of discourse analysis and chapter 3 for methodology.

¹⁰ Ethnography is the descriptive study of cultures and societies based on field work.

¹¹ "Møtet med ny teknologi - om læringsperspektiver og utdanningspolitikk"

it is necessary to nurture the critical and nuanced perspectives when considering the use of technological learning materials in education, and to give evaluations and critical assessments an offensive backing. He says: “Enhanced linguistic awareness (consciousness about language) and lingual clarifications are both important and necessary”¹²(Haugsbakk 2002:36). When it comes to critical awareness of language, critical discourse analysis may be a possible tool (Fairclough 2006). Such perspectives give relevance and actuality to this master thesis. An invitation from the Department of Special Needs Education at the University of Oslo to become a small part of a larger study became the starting point of this research.

1.2.1 The starting point: An invitation from the Department of Special Needs Educacion

This study emanates from a larger project called ”Teachers for All” ((TFA) see chapter 1.2.2); developing an audio visual flexible learning material at the Department of Special Needs Education (ISP) at the University of Oslo. The project leader for TFA is Siri Wormnæs. The development of the teaching material is tied to a larger project called ”Challenges of reflection in Special Needs Education”¹³ at the University of Oslo; a joint collaborative project between ISP and InterMedia¹⁴. International master students at the Department of Special Needs Education in Oslo were invited to join the testing and evaluation of the material. The evaluation is tied to the field of educational research (i.e. Sjøvoll 2006). This master study is dependent on the possibilities that are created through the larger project (TFA). At the same time one might say that the master student responsible for this thesis has sole responsibility for her own research process. One of the objectives of this study is to gain more knowledge about the technological learning material in use.

¹² ”Økt språklig bevissthet og språklige avklaringer er både viktige og nødvendige...”

¹³ ”Refleksjonsutfordringer i spesialpedagogisk utdanning”

¹⁴ **InterMedia** at the U of O is a subject- and topic-transversive centre of competence for research, education and mediation connected to the relationship between informational and communicational technology (ICT), communication and culture. Source: U of O’s website.

1.2.2 About the learning resource TFA

The learning resource "Teachers for All" (TFA) consists of a CD containing filmed sequences from educational settings in primary education in Uganda. The sequences show actual situations in real settings. Attached to the video sequences are tasks and questions for discussion and reflection concerning important aspects and dilemmas in the field of Special needs Education. The questions are related to the following subjects: Mathematics, reading, inclusion and visual impairment. The material is developed and to be used in Teacher Education for an inclusive school. In developing the material some considerations have been observed: That the countries and regions of the global "South" do not have a joint extensive or extended cultural experience as given by the Norwegian term "adjusted education for all" (tilpasset oppl ring) nor the tradition of special needs education integrated in regular primary schools, that there may be a shortage of learning materials and equipment in classes, and further more that "reflection" has not been an educational tradition in teacher education¹⁵.

The learning material is tested as a prototype in Uganda, Kenya and Norway. The development and evaluation of the new learning material (TFA) is founded in the "Program for Flexible learning"¹⁶ at the University of Oslo.

Herein lies the use and implementation of flexible ways of teaching as a tool for fulfilling the "Plan of Strategy for flexible learning"¹⁷ (2003-2007) and the "Quality Reform in Higher Education"¹⁸ (St.meld nr. 27(2000-2001) (UFD 2002), St. meld. nr.16 (2001-2002) (UFD 2001)). As a technological learning resource the TFA material is easy to use. The CD-disc may be played on a personal computer or a DVD-player. Portable DVD-players with easy use technology and simple play and

¹⁵ (Fleksibel-l ring) <http://www.uv.uio.no/fleksibel-laering/2006/Refleksjonsutfordringer/Innhold.html>

¹⁶ "Flexibel learning" implies a student active and learning centered approach to education that integrates different types of technology (Alexandersson m.fl. 2001:13). This covers didactic implementation of different technological information and communication tools (ICT) in higher education (source: SOFFs plan of strategy 2000-02).

¹⁷ "Strategiplan for fleksibel l ring"

¹⁸ "Kvalitetsreformen av h yere utdanning"

replay functions were used throughout this research. The choice of CDs makes the material suitable as an integrated pedagogical-technological solution in Teacher education in the global South (Wormnæs 2006). To understand how the use and implementation of the learning material (TFA) connected to discursive practices in the field of Special Needs Education requires a clarification of the term discourse and some reflections on the limitation of this kind of analysis.

1.3 Approaches to and limitations of discourse analysis

The term "discourse" comes from the Latin *discursus*, which in its etymological meaning means to "run back and forth". Several dictionaries present the word discourse as conversation or speech; and it has to do with the use of language, a communicational event that involves face-to-face interaction.

Within traditional theories of language the term discourse has been understood as a combination of utterances and speech acts¹⁹. Within the social sciences the term discourse has had an extended or augmented meaning and this way of defining discourse has found its way into branches of language research and other disciplines of research. With the psychologist and philosopher Michel Foucault (see M Foucault 1970, 1972, 2006) as a starting point for thought, discourses are understood as systems of knowledge and ways of thinking. To Foucault discourse is a network of utterances, tools, practices and institutions that shape and form certain ways of thinking that is "put into play". It's about power. Foucault (1999:10) states that discourses not only reflect the fights for power and systems of hegemony, but discourses are "what is being fought about and by the aid of, the power one seeks to acquire". Discourses are tied to power also by the French sociologist Pierre Bourdieu (1996). Those that have the power to define the form, content and coherence of language will also have the symbolic power to define and organize the social reality and the knowledge about a culturally decided, joint reality:

¹⁹ Speech acts are certain forms of lingual/verbal utterances that may "change something in the world" and they may be viewed as actions as well as utterances. The effect of the utterance (speech act) may have direct influence on the listener or it may imply a threat of action, or express meaning (Austin 1962).

"Symbolic power is the power to constitute what is given, through statements about it, to make others see and believe a world view, to confirm it or change it, and through the world view also [influence] the action in the world, and thereby the world itself".²⁰ Bourdieu (1996:45).

Power is positive in the sense that it gives order to chaos, but it produces discursive sets of thinking that give conceptions about reality, meaning and truth. As ways of thinking discourses are complete sets of lingual and verbal systems that shape the way we perceive reality, they are part of terms, questions, formulations²¹ and interpretive repertoires²² that are embedded in language and is shared by individuals, groups, communities, societies and cultures (Scollon and Scollon 2001, M Foucault 1970, Jørgensen and Phillips 2006). The meaning of language changes as it is formed and influenced by social, societal and institutional structures and power relations. The linguist and discourse analyst Norman Fairclough (2006) states that these processes are rooted in socio-historical matters that may be understood within the frames given by cultural political economy²³. To Fairclough language also has to do with power: a basic question of democracy (Fairclough 1995:221). According to Fairclough (1995) discourse has three functions : to construct social identities, to construct social relations and to construct systems of knowledge and meaning, for instance in the form of ideologies. *Ideologies* are in his opinion (1995) discursive constructions of practices seen from specific perspectives. According to Fairclough (2006) there will often be dominant discourses that are officially recognized and approved. The use of dominant discourses puts limitations on what is "allowed" to be said or done within a discursive practice. This implies that people actively create a

²⁰ "Symbolsk makt er makt til å konstituere det gitte, gjennom utsagn om det, til å få andre til å se og til å tro på en verdensoppfatning, til å bekrefte den eller til å forandre den, og gjennom verdensoppfatningen også handlingen i verden, og dermed verden selv".

²¹ Systematized statements and expressions

²² Interpretive repertoires points to the accessible ways of understanding that are possible within the frames that are culturally decided

²³ A "Cultural Political Economy" understands economical and political systems and organizations as socially constructed and constructing for objects and subjects within the system. Economy and politics are culturally founded and rooted in practices of interpretation, conventional understanding of meaning, values, attitudes, norms, identities, and more (Fairclough 2006).

world of rules in their “every day practices” (Fairclough 1992a, in Jørgensen and Phillips 2006:78). New discourses constantly arise, and they may be rejected or appropriated. An appropriation may motivate change of social practices (Jørgensen and Phillips 2006). According to Fairclough (2006) such social change includes how social actions and events change character; in social practices, in the networks of social practices and in a long term view a change may happen also in social structures as well as in language. From this point of view we may say that discourses shape and influence the social world; they both constitute and are constituted in societal contexts, practical conversational contexts and language interaction processes through *communicative events*. Norman Fairclough calls these communicative events for “*the semiotic moment of social events*”; that is moments of meaning or such interconnected utterances — written, spoken, bodily expressed, gestural or multimodal — anything that in a wide sense may be called “texts” (Fairclough 2006:166,30). These meaning bearing moments are according to Fairclough chained together in a dialectical and intertextual way. Social events are what happens or is done within the event or text, and social practice may be defined as *the way people do things* or what “happens” in social institutions and organizations. Language is from this point of view a form of social structure that is mediated through social practices. This mediation is, however, both complex and indirect. Fairclough (2006:31,32) says:

“There is clearly no simple relationship between what actually happens in a concrete event and what generally happens in an institution or organization, even if the event concerned can be squarely located in a particular institution or organization (and many events cannot).”

Fairclough (2006) points out that the relationship between text and discourse is marked by a high level of hybridity. Within a communicative event people may speak from contrasting discourses. Conversations may therefore not be seen as direct expressions of neither a social structure nor a represented “reality”, nor a given discourse. This puts limitations on the interpretation and explanation of what happens within a discursive event. Several elements are put into play: Discursive practices and contextual interrelations decide what is allowed to be said in a given field of discourse, and opposing or contrasting discourses exist side by side within the same field of knowledge (Scollon and Scollon 2001). The most part of what the

participants think or feel in a conversation will never be verbalized. Furthermore, there is no obvious connection between what is said and what a person may mean, however explicit a person might express herself (Garfinkel and Sacks 1970). The participants of a conversation may speak from different positions, roles, perspectives and discursive fields often within the same communicative event (episode of utterance) or sequence of conversation (Firth 1995, Scollon and Scollon 2001, Clark 1996). We are all members of several different communities of discourse. When technology is implemented, this technology or learning tool in itself carry discourses and discursive practices that may influence or govern the discursive content (Manovich 2001, Nardi 1997). These factors constitute limitations for what kind of information it is possible to “gain” from a discourse analysis. Adam Jaworski and Nikolas Coupland (1999) say in the book “Discourse Reader” (1999) that the concept of “discourse” in several ways is so abstract that empirical procedures for analysis are difficult to construct. You cannot expect a “discourse” or a “discursive community” to suddenly reveal itself directly. To study language as discourse means to apply certain *theoretical and methodological approaches* as premises for asking and answering questions of research and when considering language as “data”. The theoretical premises will be presented in chapter 2 and the methodological in chapter 3. The specific research questions of this master thesis will be presented shortly in the following chapter.

1.4 Defining the main research questions

“Knowledge and insight are understood as the result of a continuous negotiation of meaning” (Wittek 2004:17).

The topic of this master thesis is *conversations*, which springs from the implementation of a technological, video and task based learning and teaching material (TFA). The learning material is viewed as a mediating²⁴ tool for such knowledge, experience and scientific content and such discursive practices that are

²⁴ Mediation here– the process of being instrumental in bringing forth knowledge, experience and scientific and discursive content

culturally tied to the field of Special Needs Education. The main research question is: *How do international master students at the University of Oslo negotiate knowledge and meaning in group conversations when a video and task based learning material on CD is implemented as a learning resource, what is negotiated and what may explain the interaction process?* The main research question consists of three study questions. A broad understanding of the concept of knowledge lies at its base. By negotiation here is meant the ways the participants in the conversation jointly define the conversational situation and their focus of interaction from what is relevant within the frames of the conversations. This specifically takes into consideration the contextually²⁵ based platform of understanding that is negotiated. The following research questions may be derived from the main research question: Why do the interactions happen the way they do? Can something be said about the learning material's potential as an aid for learning and the possible effect the use of this technology has during the conversations? Have the presented discourses been "moved or augmented" through the process of establishing joint understanding?

Such questions give the starting point for exploring those conversations that constitute the empirical basis of this master thesis. The questions simultaneously entail a form of evaluation of the learning material (TFL), both explicitly and implicitly. By evaluation here is meant a systematic examination of how things happen and pointing out possible explanations.

Educational research that show earlier experiences of implementing technology in conversational settings may give some references to what may be considered "good or bad" within the field of newer learning theory. This kind of knowledge may set a norm or a standard for evaluation. The evaluation will be both formative²⁶ and summative²⁷, and in practice it will be pragmatic. Such information provided may add

²⁵ The term "*con texere*" etymologically means to *weave together* : context is then understood as anything woven into the conversational situations from the premises given by lingual and discursive practice, also on a societal level (See context 2007 in Caplex).

²⁶ Formative evaluation means that the evaluation serves as feedback to the developing research project in the try-out and implementing phases, so the researchers may better understand and improve practice.

²⁷ Summative evaluation is a form of end-result assessment. The approach is concerned with evaluating the result of a

to further development of the learning material, and in a larger perspective any changes may change teacher education.

The structure of the thesis is shown below.

1.5 The structure of the thesis: A short reading manual

Chapter 1 gives a sketch of the thematic background of the thesis, its objectives and premises. Since discourse analysis is a relatively new phenomenon in the field of Special Needs Educational research, a relatively large part of this chapter is dedicated to defining the concept and boundaries of discourse. *Chapter 2* gives a theoretical frame of understanding for the field of study. This Chapter takes into account such theoretical perspectives on language that lies at the root of discourse analysis.

Chapter 3 renders knowledge on the design strategy and methodology of this study. Methodological aspects of discourse analysis are accounted for. Chapter three gives an overview of the process of analyzing data, credibility, reliability and ethical considerations. *Chapter 4* presents the empirical data of the study. The three levels of discourse analysis are shown together with a description, interpretation and explanation of the empirical basis. *Chapter 5* sums up and concludes. A self-evaluation and a metareflection of the thesis are presented. As a closing feature this chapter points to new possible research areas and questions.

Summary

Conversation and technology has experienced an increased focus of interest during the past decades. This master thesis explores negotiation of knowledge and meaning in conversations about visual impairment and inclusion in Special Needs Education, with a video based learning material as a learning resource. The approach is discourse analytical.

The theoretical framework for the field of study will be broadened in the next

chapter, where a specific focus will be the principles of understanding discourse analysis as founded in social constructivism and philosophy of language.

2. Theory: Discourse Analysis – An overview

“Constructing language as discourse involves orientating to language as a form of social action, as a functioning form of social action embedded in the totality of social processes.”(Jaworski and Coupland 1999:47)

This chapter gives a theoretical frame of understanding for the field of study. The chapter accounts for such perspectives on language that lies as a theoretical base for discourse analysis. Language and conversation are viewed from a socio-cultural perspective. The chapter also presents research and experiences connected to the implementation of conversation and technology in education.

2.1 Discourse Analysis as a theoretical discipline

Discourse analysis as a discipline is like a tree with several branches grafted into its stem. The branches may flower and bloom in various ways, but still has mutual roots. The term discourse analysis does not refer to one collective theory, but rather” a range of subject-transversive and multi-disciplinary approaches” as stated by Marianne Winther Jørgensen and Louise Phillips (1999:9). There is no united way of performing a discourse analysis. We may find different traditions as *conversation analysis* ((CA), se Schlegoff 1999, Schlegoff and Sacks 1999), *foucauldian discourse analysis* ("discourse archeology" and genealogic analysis, see Michel Foucault 2006, 1972, 1970), *discursive psychology* (se Potter 1996), *interactional socio-linguistics* (see Goffman 1959, 1999, Gumperz 1999) and *critical discourse analysis* ((CDA), se Fairclough 1995, 1999, Van Dijk 2001). The following account gives a short description of CA and CDA, since these theoretical approaches are most relevant for this master thesis.

Conversation analysis (CA) springs from ethno-methodology ²⁸; which entails

²⁸ Ethno-methodology is a sociological theory about understanding how people through daily interaction organize and understand their social world. The term and theory was launched in the nineteen sixties by Harold Garfinkel (Jaworski og Coupland 1999). Ethno methodology is the study of the methods people use for producing recognizable social orders (Garfinkel:2002:6). Social orders are according to Garfinkel constituted by the participants in a conversation. See also note 7 p. 10.

studying what people "do" in social interaction and what they "know" about the interaction. Ethno-methodology is concerned with the procedures by which that social order is produced, and shared. Social structure is a form of order, and this is constituted partly through conversations, which themselves are ordered (Jaworski and Coupland 1999). CA points out that social interaction is a function of social structures and social institutions. From this point of view language is seen as a form of social action, viewed as a *conversation-in-interaction*. The objective of conversation analysis (CA) is to reveal tacit presuppositions, socio-linguistic competences and underlying conversational structures which are behind the production and interpretation of conversational sequences (Jaworski and Coupland 1999). It was Harvey Sacks and Emmanuel Schlegoff in the 1960's who began to study conversations (Jaworski and Coupland 1999). Their objective was to make social action visible and accessible for analysis. CA assumes that conversations as social events and actions are governed by a whole range of important principles concerning conversational design²⁹; for example *turn taking, sequencing and repairing* (Jaworski and Coupland 1999). CA has been criticized for not taking into consideration cultural and historical context and power relations within the conversational interactions (Jaworski and Coupland 1999).

Critical discourse analysis means an analytical exploration of ideological categories and roles seen from perspectives of power (Jørgensen and Phillips 2006). Herein lies the assumption that discourses themselves are *constructed* (Jaworski and Coupland 1999). If discourses are challenged, one will probably find alternative ways of understanding. This assumption is founded on the belief that social practices, communicative events and texts spring from and are ideologically formed by power relations. According to Fairclough (1995) the goal of critical discourse analysis is to explore relations between discourse and society which may contribute to language awareness. Researchers within critical discourse analysis often have an objective of changing social practice (van Dijk 1998, 2001, Fairclough 1995). CDA is thus not

²⁹ See below in chapter 2.2.2.

politically neutral (Jørgensen and Phillips 2006). This constitutes the critical perspective: "Criticism will unveil the role that a discursive practice plays in the maintenance of different power relations" Jørgensen and Phillips state (2006:76). The underlying premise is that changes in discursive practice happen when discursive elements are articulated in new ways (Jørgensen and Phillips 2006). Critical discourse analysis often handles ideological structures as scaffolding for the social construction of reality; that is it often attends to questions concerning sex, ethnicity, disability and social class, and furthermore any "us-and-the-others" ways of thinking. According to Fairclough (1995:221) discourse analysts play an important role in offering critical language awareness to the educational systems which may give reflective analyses of educational processes. CDA has been criticized for an implicit "slant" because of its normative foundations of social understanding (Jaworski and Coupland 1999).

Whatever theoretical approach, it is necessary for any discourse analyst to acquire knowledge about language and social interaction. Some basic points will be presented next.

2.2 Understanding discourse analysis: language in joint interaction

The approaches to discourse analysis presuppose that our access to reality always happen through language. Language is used in both inner and outer cognitive interactions processes and humans have inborn resources for lingual and social interaction with others (Bruner et al 1966, Vygotsky 1978, Wertsch 1998, Per Linell 1998, Säljö 2006). Language does not mirror an objective world, but constitute the world for us as a mediating tool for action, interaction and learning. Interaction is possible because the interaction partners share communicative competence; knowledge about language, lingual elements and the structure of language speech act patterns, cultural norms and expectations of language (Scollon and Scollon 2001).

The participants of a conversation are members of several different discourses, and all communication situations may be said to be multi-discursive (Scollon and Scollon

2001:275). All actions entail a positioning of oneself and others and this produces socialization also into discursive fields. In such a perspective the individual construct shared meaning and knowledge through language in learning communities of practice (Lave and Wenger 1991, Edwards and Potter 1992, Säljö 2006) and dialogue (Bakhtin 1991, Edwards and Mercer 1987). Learning processes are constituted through dialogical, communicative and discursive activities (Bakhtin 1991, Rommetveit 1992, Edwards 1997, Dysthe 1996). Communication; from the Latin *communicare* ; that is to "make common" both language and actions (Svennevig 2001:45, "to make common" Clark 1996:153). Within a communicative activity the actors see themselves as participants in a community (fellowship) with joint points of reference. Lucy Suchman (1987/1994) says: "...(...) who talks and what gets talked about is decided then and there, by the participants in the conversation, through their collaborative construction of the conversations course". Meaning is created within the interaction. An understanding of this interaction may be reached by studying two underlying theories of discourse analysis: social constructivism and philosophy of language.

2.2.1 Social constructivism and philosophy of language: Language as interaction and negotiation

Discourse analysis as a theory draws upon social constructivist ideas and assumptions gathered from a philosophy of language (Jørgensen and Phillips 2006). Social constructivism is not a holistic theory, but a common denominator for a range of newer social theories. According to Dorte Marie Søndergaard (1996:15) social constructivism is "...confronting realism and essentialism, confronting the modernist ideals of science, and the emphasizing of social reality as constructed by people".³⁰ Social constructivists choose to study the individual in a social context, and see the collaboration between individuals as a resource for learning. Social and cognitive processes are understood as being mutually constituted (Dysthe 1999, Ludvigsen and

³⁰ "...opgøret med realismen og essentialismen, opgøret med de modernistiske videnskabsidealer, og om pointeringen av den sociale virkelighed som konstrueret af mennesker".

Østerud 2000), and cognition and knowledge are therefore distributed and situated between people, tools, technologies and *semiotic resources* (Cole, 1996, Säljö, 2000). The term semiotic resources introduces the concept of "finding meaning" in speech, and this brings forth theories about the speech acts themselves. This belongs to the pragmatic part of the philosophy of language.

The philosophy of language is concerned with everyday language, as it occurs through *speech acts* (Austin 1962) and *implicature*³¹ (Grice 1999). John L. Austin (1962) introduced the theory that utterances are actions that tell what people "do" with words. The Speech Act theory views language as practice, where utterances implicate an action which has different functions dependent on conversational contexts. These functions may be descriptions, narratives, arguments, statements, commands (orders) and questions. They may be explicitly expressed or hidden. To see what utterances mean, Grice suggests that we must see past what people say (Clark 1996:140ff) and focus on implicit understandings of meaning and context (Grice 1999, in Jaworski and Coupland 1999). The immediate conclusions that participants in a conversation make, are called *implicature*. An utterance like: "Can you look here" may be an order, a suggestion or a question about perception or movement; it is dependent upon situation and context. Through speech acts the participants of a conversation are handed different rights and duties, and an important task during a conversation is to get proof that the inter subjectivity that is established is *valid* in the given situation (Per Linell 1998). According to Herbert Paul Grice (1999) this kind of validation happens when the person *who is making an utterance* legitimize what is said as "true". The person in question must speak clearly and what is said must be relevant. The listener is responsible for being attentive and to take the utterance seriously. Grice (1999) states that communication in conversations is based on collaboration towards a joint objective. He says that you should make your contribution to the conversation as it is necessary in each phase from the accepted

³¹ By implicature is meant the formation of implicit conclusions; which is the information about meaning that an utterance provides without explicitly saying it out loud. Several levels of meaning exist in an utterance/language (Grice 1999).

objective or direction of the exchange of utterances that you are engaged in ³²(Grice 1989:26 referred in Svennevig 2001, and in Clark 1996:140). Verbal interaction is within this philosophical framework understood as active processes that influence how we reflect and how we negotiate meaning and try to construct joint platforms of understanding. We might call this the participants' joint common knowledge. Because people see things from different points of view, this joint understanding will probably never be more than *partial*.

Someone who has researched how joint understandings are made is the psychologist and language researcher Herbert Clark. In his book "Using Language" from 1996 he draws upon social and cognitive theories within discourse, dialogue and social interaction. Clark states that language is joint action where the activity is to coordinate the action. Speakers and listeners coordinate the production and interpretation of communicative events through a mediation of *signals*. These signals are defined by conventions, as well as springing out from joint understanding. The participants of a conversation accumulate such understanding that moves them from one phase in the conversation to the next. On the utterance level the joint signal acts are present first in a presentation phase where the initiator gives his contribution, then follows an acceptance phase where the other participants indicate to what degree they understand and accept the contribution. According to Clark, in order for one person to understand another, there must be a "common ground" of knowledge between them."Common ground" may be defined as the sum of the participants'"...mutual, knowledge, beliefs, and assumptions" (Clark 1996:93). This kind of joint understanding encompasses three representations: *self consciousness*, a shared basis of *common knowledge* and that *all participants have mutual information*. Information here is a concept that implies *belief, knowledge* and *awareness*.³³ As participants of a conversation we assume that the others share this with us in the given context (Clark

³² Utform ditt bidrag til samtalen slik som det er påkrevd på det enkelte stadium ut fra det aksepterte formålet eller retningen med den språklige utvekslingen du er engasjert i"

³³ Clark shows how people infer this "common ground" from their past conversations, their immediate surroundings, and their shared cultural background.

1996). This may be tied to competencies in language and culture as implicit “tacit” knowledge (Polyani 1966). Mutual understanding has two main components: 1) shared knowledge and suppositions and 2) mutual experience in the interaction. This goes for personal and cultural common ground. The cultural understanding may encompass shared expertise within a field of knowledge or social field, while the personal understanding encompasses mutual *perceptual experiences* — for instance watching a video together, or mutual actions — for instance talking about “what has just been watched”(Clark 1996). This then, is conversation as a collective negotiation process.

2.2.2 Conversation as a collective process and coordination

Herbert Clark (1996) defines a conversation as a collective process where the participants alternate between activities, actions, roles, objectives and perspectives, and where meaning grows from coordinating mutual expectations. Both content and process are coordinated (Clark 1996:90ff). As a process the conversation is made up of utterances and episodes, speaking turns and sequences with questions and answers (Clark 1996:318). These processes may be put into a theoretical framework that encompasses *speaking turns*, the *turn design* and *sequence organization*. Sociolinguist and language researcher Per Linell defines a conversational turn as the continuous period of time where a speaker talks (Per Linell 1998). The action in the interaction may be verbal or non-verbal and is called the *contribution* of the turn. What go into the turn design are syntactical and grammatical traits, sentence prosody, eye direction, gestures and body posture, but also breaks, silence and minimal responses. These elements establish a complex system of conversation. In some turn-takings it may be difficult to judge who is occupying the “floor” (Per Linell 1998:145).

Sequence organization infers that utterances are constructed in relation to previous utterances and create expectations of the next utterance (Per Linell 1998). The person who speaks “owns” the turn, and when the turn is finished, the next speaker may start. The listeners must be active to observe turn changing moments. Both verbal and

non-verbal signs are given to decide when a turn has ended. One sequence begins when someone takes an initiative to an action or a topic and is taken up by the other participants. It ends when no one no longer are responding to the previous utterance (Per Linell 1998). *Repair* is a speech act where the participant localize and redefine an earlier unity of information, in a way that focus leads back to what has been said earlier, and before the speaker turns to the next unit of information in the conversational sequence. The topics of the conversation are developed from utterance to utterance in a continuous interaction between the participants (Per Linell 1998). *The system of conversation* as a whole is built on an implicit understanding of relevance, conventionality and contextual model, springing from a basic assumption that the participants are willing to cooperate and are interested in the conversation.

The conversational process is founded on the participants' preconceptions, social and cultural knowledge, both about and within what is contextually and conventionally decided. We might call this "mutual common knowledge" (Svennevig 2001:53ff). Communication researcher Adam Kendon (2004) points to Erving Goffmans book "Frame Analysis" from 1974, which shows how conversations often follow a main course within a "story-line". There will always be side-tracks in the conversations, all those actions that aren't deemed as relevant. This alternation of *what is given attention* in a conversation, and what is not, is a necessary part of and a condition behind "the process by which participants negotiate the working consensus of the interaction" according to Kendon (2004:370). The conversation process presupposes interpretation, because language never fully can express meanings and always contains several interpretative possibilities, both internal and external³⁴.

Conversations are fragmentary when it comes to topic, understanding and context (Per Linell 1998). In a conversation the participants inhabit different roles; as speaker, direct addressee, indirect addressee or listener, and this influences how one relates to what is being said (P Linell and Gustavsson 1987, Per Linell 1998). Even

³⁴ External ambiguity exists because we must interpret within context that is with knowledge connected to actions and situations, identities and relations. Inner ambiguity is how lingual utterances are put together from smaller units into a larger picture and how we as participants in a conversation both understand and signal this to one another (Scollon og Scollon 2001:60).

the listener contributes actively to the conversation and works as a response giver (Per Linell 1998:104). We find listener – response behavior and the response may be non-verbal and gestural; for instance nods or mimicry, or such short verbal-responses a listener uses while other people talk: “hmm, ok, yeah, oh, wow” (“back-channeling”, Fairclough 1995:100, Svennevig 2001:76). Who the speaker addresses may change during the conversation, but often the speaker will address the previous speaker. This means that the one addressed often catches the next turn (Per Linell 1998). In a group conversation with several participants this often leads to a splitting of the discourse. It can be shown that the conversation is held by two pairs of participants through sequences, and that the other participants act as listeners in response roles (“dyadic stretches” in Per Linell 1998:105). This way of considering conversation finds its roots in *dialogic communication theory* (Per Linell 1998).

2.2.3 Conversation in a dialogic perspective: adressivity and responsivity

In its etymologic meaning the term dialogue means “through the word” from Greek *dia* and *logos*³⁵. Logos has even other meanings: *speech, story, understanding, and reason* (Jordheim 2001:12ff). We may then define dialogue as an interaction between two or more people where the participants exchange and negotiate context-based meaning and understanding through language or symbols. It was the Russian writer and philosopher Mikhail Bakhtin (see Bakhtin 1981, 1984, 1991) who formed a philosophical concept of *dialogism*. Bakhtin proposes to study utterances situated within the framing context of their dialogic interrelations with other utterances. To Bakhtin all communicative utterances are dialogic, “two-sided acts”; always relating to other utterances or texts. This phenomenon has come to be called *intertextuality*³⁶; which means that the utterances of the conversation points to, refers to and assimilates different “voices” from earlier utterances and contexts (Clark 1996, Kristeva 1986). Per Linell (1998) states that the intended addressee always is present

³⁵ (Dialogue see Caplex), The concept of dialogue is deeply rooted in philosophy and relational communication theory.

³⁶ The concept of intertextuality was introduced by Julie Kristeva (1986) and shows that all texts relate to other texts.

in the formation of an utterance, and the speaker must adjust the utterance to the addressee's supposed background, interests and need for information. This is called the *addressivity* of an utterance; it takes certain assumptions for granted. The speaker can seldom know if these assumptions are correct, but will still have to relate to the listeners understanding of meaning and response. The listeners will here become virtual "co-writers" of the conversation. The speaker will orient himself or herself towards these virtual others, and utterances will often have what might be called a "split addressivity" (Per Linell 1998:106). A participant in a TV-debate will for instance address his or her fellow opponents, those that are watching in the TV-studio and those that are watching from home in their own living room. In this master study research the participants know that they are being video-taped and they are aware of the objectives of the research. They will address their utterances towards each other, but also towards the photographer and those that may come to watch the video tape later on.

According to Anthony Giddens people continually reproduce social structures—norms, power, discourses and meaning— in their communication and interaction (Giddens 1984, 1991). When we partake in social practices we learn to use thoughts, conceptions, knowledge and discourses attached to these practices (Lave and Wenger 1991). The participation entails learning how activities are organized in situations³⁷ and how they are related to the environment. Knowledge, learning and meaning making are primarily and supposedly constructed through interaction, even if cognitive processes come into play as well when learning something (Cole 1996, Säljö 2006). Line Wittek (2004:137) comments on such processes by saying: "Through actively putting our thinking into words and open up to the meaning that is created between people through dialogue, a transformation happens from social interaction to our own constructions of knowledge." This citation points towards a pragmatic aspect of meaning making and learning.

³⁷ In his book "Experience and Education" from 1938 John Dewey presented the so called relational theory of cognition. To Dewey experience is tied to the situation (p. 66): "For we never experience nor form judgments about objects and events in isolation, but only in connection with a contextual whole. This latter is what is called a 'situation'". With this statement he precedes the theory of *situated activity or situated cognition* (Cole, 1996).

2.2.4 Conversation as a pragmatic way of building meaning and learning

Learning can be understood as an increasing degree of mastering tools, activities, actions and discourses within *participating communities of practice* (Per Linell 1994, Cole 1996). Discourses are embedded in situational contexts and is the result of the participants' joint and mutual construction and understanding of the situation (Per Linell 1998). The utterances are situated in the activity and the context. Context is more than the situational context where things are said and done. Context is understanding and fellowships of meaning, shared discourses and communication as a mutual collaborative project. Every language interaction with others may therefore be seen as a cultural expression (Wittek 2004), and culture is knowledge. "Culture is not a set of responses to be mastered, but a way of knowing, of constructing the world and others" Jerome Bruner (1993:516) says. Within this view lies a socio-constructive understanding of the relationship between culture and language. Both speech acts and inference of meaning can be ambiguous. Jenny Thomas (1995 cited in Jaworski and Coupland 1999) states that it is possible to differentiate between three kinds of meaning in an utterance; *abstract meaning* given from concept level, *contextual meaning* from a situational level and the *power (force) of the utterance*³⁸, the last being the speaker's intention behind the utterance. The participants must alternate between a focus on and an understanding of these levels of meaning and this happens in a complex process (see Mantovani 1996, chapter 2.2.5 below). To master the conversation processes the participants use preconceptions about the language other people use, they also use the knowledge they have of the world and what they might expect from conversations. By wording the understanding that is formed, the words, concepts or discourses one presents meet alternative ways of understanding. Conversations may therefore be seen as *productive* ways to reach comprehension; to come into knowledge through a form of *exploration* (Mercer and Wegerif 1999). Confrontations and negotiations about meaning may create awareness of ideological

³⁸ Austin (1962), about the speaker's intentionality

influences (Fairclough 1992a cited in Jørgensen and Phillips 2006) and may lead to changes in social practice. Within a mutual “space in between” in conversations, we may give birth to concepts and insights in each other that might not have happened in individual settings. This is a form of learning. ”Learning grows from dialogic exchange” Line Wittek (2004:135) states.

The conversations in this study may be understood both as learning dialogues between individuals in a “there and then” situation, and at the same time as utterances within a larger picture; those dialogues and discourses that are found and created in the educational institutions and society. Global perspectives, movements and trends influence the discursive situation. The learning entails both intuitive knowledge and knowledge based on experience; in other words such “tacit” knowledge, evaluative knowledge and reflection based knowledge that is tied to the social context (Säljö 2001:13). From Lev Vygotsky (2002a:19) we know that man, cognition and language are formed by the culture, the period of time and the society they belong to. Mercer and Wegerif (1999) take these ideas and develop them further. Vygotsky views language and mutual activity as important patterns in *interaction processes*. A central point here is mediation. Physical, intellectual and language tools mediate reality (Säljö, 2001). This is why tools³⁹ are of special interest in the study of the individual and the environments (Vygotsky 1978, Engeström 1987, Wertsch 1990). The cultural psychologist Michael Cole (1996) states that cognition is formed by the social practice where the tool is used, and that artifacts⁴⁰ carry with them meanings that are constituted and re-constituted through the ways they are used in different contexts. Human knowledge and insights, conventions and concepts are built into these and become something we interact with (Rommetveit 1996, Lauvås and Handal 1990, Mercer and Wegerif 1999). As an artifact learning technology may contribute to create new interaction opportunities and communication forms, and may thus

³⁹ As a tool here is meant both lingual, intellectual and physical resources that we have access to and which we use in interaction with the world around.

⁴⁰ (Artifact from Lat. *ars*=art og *facere*=do, make) a man made product

contribute to the change in both discourses and discursive practices. This may be illustrated in a model that addresses the use of tools in a social context by Guiseppe Mantovani (1996).

2.2.5 Mantovani's model: The use of tools in a social context

The social psychologist Guiseppe Mantovani (1996) has studied interaction between social actors and technological artefacts in daily work situations and daily life. It is his opinion that there is a mutual relationship of dependency between people's interaction with artefacts in local situations, the interpretation of the situations and the construction of social context (see figure 1, attachment 2). As individuals we are interwoven in socio-cultural history, but also into discourses, discursive practices and into social orders. The socio-cultural field of function that we move about in becomes an invisible part of us and our environment, analogically to how we daily breathe in the air (Mantovani 2001). From this the individual create its identity and self projection, in addition to values, norms and attitudes. This is why Mantovani's model (1996:56ff) shows three levels: Level 1) *Construction of social context* is done on the basis of tradition, action and structure, level 2) *Interpretation of situations* is done on the basis of possibilities, interests and goals, and level 3) *Local interaction* with the environment is done in interaction between user, task and tool. In situations where participants interact with the environment, the outcome is partly decided from above according to the societal and cultural context, and partly from below from the local level of interaction. *What is talked about* within a situational context (interaction on level 3) depends on the other two levels. The interpretation of utterances in a situational context depends on the participant's interests, objectives and opportunities, but is also dependent on social structure and possibilities of action in terms of cultural and socially decided traditions and discourses. The design of the tool influences the local level, and when the tool changes or the tasks or situational context change the participants utterances in the interactions will differ from situation to situation. Mantovani's model (1996) entails a "narrowing" of a complex reality, but is useful because it gives a structure for thinking. This model adds scope to Norman Fairclough's model (1995:97, 98ff) of discourse analysis of texts (see

chapter 4 and att. 3, figure 2), where text, situational context and societal context enter into a three dimensional frame of understanding the empirical part of this master thesis. It may also function as a model of understanding the implementation and use of technological learning materials as tools in higher education. This will be explored in the next chapter.

2.3 Technological learning designs in education

The technological learning resources that are being developed and used in higher education today differ greatly; from simple audio visual tools and "power points" to very well developed computer supported learning systems using internet, e-mail, videoconferences and on-line resources of different kinds; for instance databases, learning platforms and so on⁴¹. The latter are often named under the umbrella term computer supported collaborative learning (CSCL) (Dysthe 2003). Even if the different learning technologies are divergent both in content and design, they have however some perspectives of learning in common. For instance that contextual learning gives better and more stable learning effects than abstract learning (Mantovani 1996:101, Rogoff 1990). Learning activities that take place in relevant contexts, through interactions that demand collaboration and reflection are therefore given an important place in technological learning designs (Pea 1996, 1992b, Ludvigsen and Hoel 2002a). The perspectives on context contain two important conditions: 1) That the social, interpersonal and cultural environment where learning takes place influence both learning processes and learning effects, and 2) that skills, learning strategies and processes are tied tightly to the immediately social and practical situational learning contexts. This learning perspective has brought forth focus on collaborative activities (Ludvigsen and Østerud 2000), problem, dilemma and case based learning methods (Bruffee 1993, Koschman 1996, Ludvigsen and Østerud 2000, Dysthe 2003, Pettersen 1997) and giving importance to reflection and the development of metacognitive, "transformative" competence (Boud m.fl. 1985,

⁴¹ For instance the learning technologies behind the acronyms CAI, CBL, CSCL, CSILE (Koschman 1996), DoCta (Wasson and Ludvigsen 2003), PILOT (Erstad 2003), m.fl.

Boud and Feletti 1997, Lambert and Willams 1999, Schön 1983, Pea 1996), and further more the use of technological tools in different ways in education (Scardamalia and Bereiter 1994, Nardi 1997). What is common for all these learning technologies are that they allow the participants to use several modalities and representational forms. It is the opinion that this leads to changes of concepts and augmentation of knowledge and meaning together with construction of new understanding (Pea 1993). Within theories of learning such learning designs find the reasoning that the use of technology may function as "scaffolding for learning" (Vygotsky 1978, Bruner 1996/97) in such a way that students may transcend their own cognitive capacity (Alant m.fl. 2003, Ludvigsen and Hoel 2002a). The educational psychologist Gavriel Salomon (1992) says that the computer technology realize an important potential in making learning into an active construction process instead of an assimilation process. The Russian psychologist Lev Vygotsky is well known for his concept of "the zone of proximal development" (Vygotsky 1978). In this term lies the premise that humans may learn concepts they cannot understand on their own by being helped by others. Such an understanding has also - within an interaction perspective between man and machine - been tied to the perception of learning technology as a form of "agent", similar to human participants (Latour 1999)⁴². Agency here means "the capability to make a difference" (Giddens 1984:14).

What is mentioned above may be used analogically in terms of the audio visual learning material (TFA) that is being implemented in this master study. Even if the TFA-material cannot be placed within computer technology as such, they still carry some mutual traits. The learning design of the learning material might contextualize discourses in two ways: 1) through communicative interaction: for instance by "storytelling" and 2) Through choosing ways to realize the communicative interaction in given "scenarios" (Kress and van Leeuwen 2001:119). We may view this as a "visual realization" of subject specific and other discourses that may be mirrored in

⁴² Belonging to theories of man-machine interaction; may be put under further scrutiny.

the conversations where the learning material is being used. This provides an argument for making conversations with technology an object of study.

Summary

This chapter has shown perspectives on language that lie as a basis for discourse analysis. Conversations are viewed as interaction and negotiation, as a collective process in a social context, from a perspective of dialogism and as a process of pragmatic meaning making. Technological learning design has been discussed with the aid of a theoretical model showing the use of tools in a social context. This provides an argument for making conversations with technology an object of study.

When a learning material is implemented it will have a potential learning effect on the users that may be found, mirrored or realized in the discursive interaction. How this may be examined and researched brings us to those *methodological aspects* this master thesis takes into account.

3. Method: Design and strategy

“A research design is the logic that links the data to be collected (and the conclusions to be drawn) to the initial questions of the study” (Yin 2003:19)

This chapter accounts for the design and method of the study and describes research strategy and method of collecting data. Methodological approaches and principles of discourse analysis are presented as well as the process of discourse analysis, the reliability of the study and ethical considerations.

3.1 A choice of method and design

According to Steinar Kvale (1997) method is ”the road towards the goal”, and methodology is the context, the approaches and the perspectives that are chosen for a research project. By perspective here is understood a professional outlook and the choice of context of opinions and ways of understanding. One might say that a research design shows the study’s total plan of work; containing methods for collecting and analyzing data (Fuglseth and Skogen 2006). What is studied both from practice and through analysis in this research are sequences and episodes of conversation and between students talking together in groups. The objective is to study how knowledge is negotiated, what is being negotiated, and what may explain the interaction processes. Implied in the research questions is a “why” that points to an evaluative and descriptive perspective (Sjøvoll 2006). These research questions belong to *the case study* as an area of research (Skogen 2006). A case study is a research strategy that according to Robert Yin (2003) is relevant for empirical research, descriptive research and evaluation research. A case study is defined as an empirical inquiry that investigates a contemporary phenomenon within its real life context, especially when the boundaries between phenomenon and context are not clearly evident (Yin 2003:13). The same case study may involve more than one unit of analysis (subunits) within a larger unit. This is named an ”embedded case study” design (Yin 2003:39,40ff, in Norwegian "sammensatt casestudie", Skogen 2006). The research project in this master thesis involves several conversations and

sequences within a larger unit of analysis. It is important for a case study to maintain a general analytical strategy that is supported by a theoretical framework, rivaling analytical explanations and descriptions of the case (Skogen 2006). A discourse analytical approach gives such a frame (Fairclough 1995). The theoretical scaffolding in a research project may be mirrored in the methodological choices that are made. Discourse analysis as a method belongs to a qualitative research tradition. Qualitative methods are suitable for research projects where the outcomes are not predictable (Yin 2003). Qualitative research may cast a light on single environments, to find meanings and interrelations. Within the qualitative research frames of an discourse analysis the researcher is seen as an active participant in a reality that may always be described from different perspectives (Jørgensen and Phillips 2006). A ground principle is that the researcher uses his or her "prior expert knowledge" and is aware of "current thinking and discourse about the case study topic" (Yin 2003:137). In this sense the researcher's view will influence what kind of knowledge that may be gained through the methods and strategies that are chosen for collecting and analyzing data.

3.1.1 About discourse analysis as a strategy for analyzing data

Discourse analysis as a field of research has in several ways during the past 20 years shown how social and cultural factors frame both production and interpretation of knowledge in several different areas in society (see Van Dijk 1997, 1998). Still, this kind of approach seems to be relatively new when examining the field of educational research in Norway. The use of different learning tools as a support of face-to-face conversation in education on university and university college level has not been extensively mapped (see chapter 3.5). Research concerning *writing* has been done, especially the use of chats and portfolios in net based medias (Allern 2005, Dysthe 2003) (Dysthe and Engelsen 2003, Otnes 2004, Ludvigsen and Flo 2002) and research involving different e-learning tools for student's knowledge building (see for example Prosjekt Docta⁴³ and PILOT⁴⁴). Research done with the aid of discourse

⁴³ (Wasson and Ludvigsen 2003)

analysis as a method has been made in areas involving *educational texts and textbooks* (Tønnesson 2001, Selander and Skjelbred 2004), *interaction* between students in primary school (Alant m.fl. 2003) and *reasoning in student's interaction* in primary school (Arnseth 2000). Through the project "Flexible learning" a whole range of teaching and learning materials based on ICT and the use of video sequences which present dilemmas, cases, problem based learning (PBL) and similar projects (see for instance InterMedia at UiO) have been developed. The field of study is complex and several didactic and pedagogical assumptions about teaching higher education comes into play (Laurillard 1993). This is why it has been important in this master study to use a set of analytical procedures as a structure for doing analysis. An approach by a well renowned analyst Norman Fairclough (1995) has been chosen. He has developed a model for discourse analysis which is described in the next chapter (for a graphic presentation see page 96).

3.1.2 Norman Fairclough's model of discourse analysis

Norman Fairclough (1995:97ff) has a three dimensional approach to discourse analysis that is *textually oriented*. The term "text" is broadly interpreted to accommodate complex and multimodal expressions. The premise is that discourses are representations of reality that are embedded in socio cultural practice on a range of levels; in the given situation, the institution or organization and on a societal level. Language is an element of the social at all levels. It is Fairclough's opinion that any use of language is (1) a text; uttered or written, (2) a discursive practice (text production and text interpretation) and (3) a socio cultural practice (see att. 3, figure 2, for a graphic presentation). Social life can be seen as constituted by networks of social practices, each of which consists of various elements including discourse. Social practices can be thought of as ways of controlling the selection of certain structural possibilities and the exclusion of others, and the retention of these selections over time, in particular areas of social life. Fairclough is thus interested in

⁴⁴ (Erstad 2003).

how social practices are discursively shaped, as well as the subsequent discursive effects of social practices. A discourse analysis must therefore according to Fairclough (1995) be made from a description of the text, an interpretation of the relationship between discursive processes and the text, and an interpretation of the relationship between discursive processes and social processes. The link between the socio cultural practice and the text is mediated by discursive practice. Discursive practice is how a text is produced and interpreted. This is interconnected with the socio-cultural practice, conventions and orders of discourse that this discourse is a part of (Fairclough 1995). A language thus defines a certain potential, certain possibilities, and also excludes. Fairclough calls his approach to lingual awareness for *critical*. In this is understood that social practices, communicative events and texts springs out of and are ideologically formed by relations of power. Critical discourse analysis aims to provide a framework for systematically linking properties of discoursal interactions and texts with features of their social and cultural circumstances. Fairclough has been criticized for not making clear the borders of discourse analysis and analysis of the social practice in his model of analysis, and for not giving pointers to “how much” social analysis is sufficient in the research (Jørgensen and Phillips 2006). He has also been criticized for using several theoretical approaches as basis without defining them explicitly. This master thesis therefore involves a thorough presentation of theoretical premises.

3.1.3 A practical approach to discourse analysis

The research question of this study lies within the frames of a relatively new field of study, and it was difficult to find an existing method of analysis. It is however in concord with discourse analytical and qualitative research traditions to adapt a research design especially to the character of the research (Jørgensen and Phillips 2006:88). We may thus say that the analysis of this master study is ”tailor made” for the object of study, inspired by Norman Fairclough’s three recommended levels of critical⁴⁵ discourse analysis. At the same time this research project also draws upon

⁴⁵ By critical is meant criticism towards society being aware of power relations. This presuppose that the objective is

theoretical and practical elements from conversation analysis for example when considering response giving in conversations (CA, see chapter 2). The project is described and analyzed at three levels: 1) the conversations as text 2) conversations seen in the light of situational context and discursive practice and 3) conversations and technology seen in relation to cultural context. By conversation as text is understood here any lingual utterance as an “event of the moment” a conversation transcribed. The analysis involves *negotiation*; what kind of negotiation happens within the conversations, how they occur and what might explain what happens. Included in this discourse analysis are description, interpretation and explanation. A description on how data was collected is presented below.

3.2 About the research process

This study started by establishing contact with project leader Siri Wormnæs at the Faculty of Special Needs Education at the University of Oslo. We held to meetings where the objective was an exchange of information and talking through the practicalities of the research work. After contacting the leaders and teachers at the international master program in Special Needs Education, a meeting was held with the students present and where information about the project was given. All the international students at the faculty were invited to participate. This kind of data collection may be called finding sources of evidence from an accessibility perspective. Belonging to the student group of 2006/07 are 16 students from different parts of the world (Asia, Eastern-Europe, Europe, Africa) and countries (China, Vietnam, Bosnia & Herzegovina, Romania, Georgia, Uganda, Ethiopia, Kenya, Cameroon and Sweden). Their backgrounds and education are varied, but all have higher education in the disciplines of for instance psychology, pedagogy and public administration. Several, but not all students have experience from working with

changing and enhancing practice (Jørgensen and Phillips 2006). Critical discourse analysis often has innovative traits. Critical language awareness will give people insights into the discursive practice that they participate in when using language, and insights into the social structures and power relations that discursive practice forms and is formed by (Fairclough 1992:239)(Fairclough 1995:219ff).

children with disabilities.

The data of this research project has been collected by two days of videotaping student's conversations in January 2007. The informants are the 16 students from the international master program in Special Needs Education at the University of Oslo. The conversations where the audio visual learning device is implemented were offered as a group work assignment within the regular curriculum. All students present wanted to participate and were divided into groups of 4-5. There were fewer men than women, and the plan was to "distribute the men evenly" across the groups. In practice however, all the students did not attend according to the set plan. As a result the participants were randomly dispersed (not taking gender into account). The groups had between 2 and 4 participants. The video tapings of the student's conversations gave raw data in the form of video films on CD discs, the duration of 45 minutes each. To limit the size of the research 4 conversations were chosen for closer analysis. A primary criterion for data selection was to choose conversations with no fewer than three and no more than 4 participants. Three of these conversations, about 135 minutes of film, were then transcribed into written form. From these a selection of 90 minutes was used as basis of analysis.

3.3 Collecting data for analysis

There are several ways of collecting and analyzing data within case studies (Yin 2003). To be able to make a discourse analysis of conversations it is expedient to video tape and transcribe what is said into written text.

3.3.1 About the use of video for collecting data

Positive effects of using video for collecting data has been documented (Lomax and Casey 1998). The strength of video observation as instrument of collecting data is that it covers events in real contexts where the context is a part of what is being mapped (Yin 2003). Video tapes are often accurate, detailed and complex, and you may watch them repeatedly (C Goodwin 1981, Charles Goodwin and Heritage 1990, Lomax and Casey 1998). The use of video however has its disadvantages. A video

film is not just an objective, correct representation of what happens in a "real-life" setting. Any transformation will always bring about some loss of information. There may be technical issues, for instance distorted focus, sound disturbances and so on. But maybe the creates disadvantage is tied to the social signification and the participant's awareness of this (Lomax and Casey 1998). The event may present itself as different because of its being observed (Yin 2003). As a participant-observer the researcher has the strength of gaining his or her own insights, but the participation may at the same time influence the event (Yin 2003). The researcher in a photographer-observer-role is present in the interaction, but still participates without a clearly defined role. In the situation the researcher is present, but still des-engaged in the interaction processes when it comes to greetings, eye-contact and so on. The participants, on the other hand are aware of their roles as informants and that they should primarily ignore the photographer and the camera. They are in what one might call "an active state of consciously not noticing". We must still be aware of the participants' split addressivity (Linell 1999, see chapter 2). The research facilities consisted of two rooms for teaching; one large and one small at the Faculty of Special Needs Education (ISP). Two cameras were used, provided by the faculty. Group instructions given involved electing a group leader who should make sure everyone got a chance to say something during the conversation. To lessen the disturbance by the "photographers" (project leader and master student) left the rooms as soon as the cameras were rolling. The cameras were set up on a table in the respective rooms. Within the small room it was difficult for the students not to actively notice the presence of the researcher. This was easier to do in the large room. Some questions were directed towards the researchers cum photographers and in these cases we answered promptly (as was agreed upon beforehand). The video tapes were made into DVDs by InterMedia and the Faculty of Special Needs Education.

3.3.2 About transcription as a tool

Transcriptions are written forms for idealizing the spoken language; an interpretation of what is being said (Fairclough 1992). The transcription constitute the first part of an analysis (Ten Have 1999). There has been made several kinds of transcription

systems to systemize this process (Jefferson 1984, Jørgensen og Phillips 2006, Potter 1996). Such systems use symbols for elements that enter into conversations, for instance pauses, non-verbal activity, overlapping utterances sudden stops in the utterances and so on. A frequently used system has been developed by Gail Jefferson (1984)(see att. 1). Within discourse analysis it is common to use a simplified version of this, and the same approach goes for this thesis. The recordings of the conversations were written down orthographically and word by word. Three chosen conversations of 135 minutes were transcribed. From these come extractions of 90 minutes as basis for quotations presented in the text analysis. Empirically this was done by playing the video on one half of the computer screen while a word document occupied the other half⁴⁶. In such a way whole sequences evolved as a textual basis for analysis.

3.3.3 About the analysis of speech

Because conversations are complex and rich in nature, an analysis may only be partly representative of the reality that the raw data are collected from (P Linell and Gustavsson 1987). The process of analysis was mainly divided in two phases, where the first involved seeking language markers and unities of meaning in the material. The second phase in the analyzing process involved to formulate suppositions about these markers in an interpretive process (Potter and Wetherell (1987:168) cited in Langdrige 2006:320). The work was divided into three steps: 1) Listening and viewing combined with a read through of the transcribed material. 2) The text was then read to derive units of meaning and thematic fields (topics or subject disciplines) and 3) finally the central topics were summed up in descriptive headings and categories organizing the data material. It was important to identify such conversation sequences (quotes) in the material which could shed best possible light on the research questions: the typical, which mirrored something important, and those that

⁴⁶ To be able to view the written sequences and the film simultaneously, I had to use font 10. Because of the symbols used in the transcription it was impossible to change to larger fonts. This is why the quotes are presented in a smaller sized lettering.

gave contrasts and showed polarizations.

The quotations are "lumped" together with analytical comments and discussions interspaced. The analysis is hereby tied directly to the empirical data, but is holistically viewed on a somewhat broader basis than the reader here gets direct access to through the chosen citations. This master study shows a discourse analysis after the model of (1995), ladled with basic ways of reasoning from conversation analysis (CA). Other works of research has been studied to understand the empirical data through analogical thinking and to develop *theoretical sensitivity*. This may be connected to *reflexivity* in research (Silverman 2005, Ten Have 1999, Langdridge 2006), and deals with the credibility of the study.

3.4 Credibility, reliability and validity in the case-study

Any research is supposed to give answers to questions in a way that is credible, and the results should be valid and reliable (Kvale 1997, Silverman 2001). It will always be necessary to deal with validity and reliability in research (Fuglseth and Skogen 2006), and for qualitative research this involves the reflexivity and awareness of the researcher in terms of role, method and field of study (Silverman 2001). Validity involves making sure that the study brings forth the kind of knowledge that the research questions ask for. Reliability involves the evaluation of the quality of the collected data, if the instrumental methods of collecting data have caught the correct data, and whether the material is utilized in a justifiable way (Kvale 1997, Yin 2003). For case-studies reliability and validity often hinges on the kind of logic that lies behind validating experimental approaches⁴⁷. The reliability given by video data is considered to be high (Gottdiener 1979, Grimshaw 1982, Albrecht 1985 cited in Lomax and Casey 1998).

⁴⁷ I.e. the opposite of those that spring from a positivist research tradition. Positivism within the theories of science was introduced by Auguste Comte (1798-1857) and wanted to build on positive knowledge. This implies that observations must be scrutinized in a critical way. The researcher must only use the facts that can be established beyond reasonable doubt. These facts may then be analyzed logically and general deductions may be made. This positivist view opposes a constructivist and post structuralist thinking.

The present research may have a reliability problem because the informants speak English as their second language, and periodically use words and utterances which may be difficult to comprehend. This goes for both pronunciation and content doing transcription. Extensive listening and re-listening⁴⁸, and following a renowned method of transcription has been the means of countering this any comprehension difficulties. Cultural and lingual misunderstandings may in spite of careful observation have resulted in misinterpretations. By being aware and using reflection it has been an objective to avoid observer bias. By frequent watching of the video tapes, reliability is strengthened. Validity in case studies depend on construction validity, internal and external validity, according to Yin (2003:34). Construction validity involves a demand for "thick descriptions" (Geertz 1973); the use of several sources and to present a logical chain of evidence. Internal validity means to compare patterns, building explanations, addressing alternative explanations and using models of logic. External validity involves using theory and replication logic. In this way an analytical, theoretical way of explaining which may be repeated is established (Skogen, 2006:58). By generalization here is meant *analytic generalization* – not statistic. The support of relevant theory and studying analogous research strengthens the construction validity as well as doing broad descriptions. The conceptual framework of the thesis will then have an inner consistency of logic. The internal validity is strengthened by seeking logic reasoning and rivaling suppositions. External validity is strengthened by using theoretical theories and models, but theories may also steer the understanding in certain directions so that interpretation is slanted, seen from a given perspective. This research may however have what is called pragmatic validity (Kvale 1997), because it is the interactions themselves that are the basis for analysis. At the same time the camera-effect and the presence of the researcher may be a problem of validity. The analysis of the text explores negotiation of common ground and joint understanding. Whether the participants in fact do acquire such an understanding cannot be stated with certainty. This may weaken the

⁴⁸ The listening and "reading" competence in English of this master student is based on an educational background in the English language from the University of Oslo, from living in the United States of America and an extensive experience of being an English teacher for adults in Norway.

validity. It is the participants' own utterances in the conversations that are used as a basis of analysis and this may represent a kind of social validity. If however the citations chosen are representative, the validity is weakened. On the other hand, it is quite common that the units of transcribed texts are quite small when doing discourse analysis, because expanding the size of the units of analysis does not automatically guarantee a more valid analysis (Langdridge 2006). The validity can be evaluated by finding whether the analysis has focused on what is relevant for the field of interest and the research questions.

3.5 Relevance and analytical generalization

This master thesis may be considered useful and relevant because it provides information from a field of research that has not been widely studied in Norway. Searches made in databases on master theses and doctor theses have not been able to establish whether any discourse analyses have been made previously of conversations between students in higher education in Norway. Matches have only been found concerning studies of educational texts (Knain 1999, Tønnesson 2001), studies of student conversations and reasoning in primary school (Ludvigsen og Østerud 2000, Alant m.fl. 2003, Arnseth 2000), studies of portfolios and chats on the net in University College Education (Allern 2005, Dysthe and Engelsen 2003), a case-study of learning in universities (Havnes 1997), the use of discussion in Teacher Education (Skogen 1997), an analysis of conversations in patients with aphasia (Røste 2006), an analysis of identity and ethnicity in the conversation of youths (Seim 2006). None of these are based on discourse analysis after the model of Fairclough (1995). It has not been possible to find examples of studies that use discourse analysis of conversations when implementing the use of technology in higher education in Norway. The research questions and focus in this master thesis may therefore give a "new" kind of knowledge within Special Needs Education. Critical discourse analysis has an implicit objective concerning the change of existing practice. Such a critical objective is probably not realistic for this thesis, except as a way of raising awareness about the language in use and the importance of discourses in education. The findings

in this study carry the possibility only of a tentative analytic generalization because the results are situated; dependent on the situational setting.

3.6 Perspectives on ethics

The term ethics in research points to the sets of values, norms and institutional orders that constitute and regulate scientific activity (Kalleberg 2005:5). As a master student one is obligated to follow these ethical guidelines. This involves reflections on and efforts to prevent "doing damage"; which is being respectful towards others and keeping confidentiality and anonymity intact. In practice this involves giving the participants the freedom to choose whether or not to participate through informed consent. Data that contains sensitive information about identifiable persons requires the endorsement and declaration of professional secrecy from the Data Inspectorate⁴⁹, and the registers must be processed correctly and destroyed after use. This study does not involve the informants' private sphere and what comes across is not sensitive information. The group of international students however, is small and there existed a small possibility of identifying the participants. The placement of participants in different groups gave a form of rotation that makes identification more difficult, as does keeping names, places and countries anonymous.

Any research is in some way influenced by the values and attitudes of the researcher (Silverman 2001), both conscious and unconscious. The critical perspective that is implicitly implied in this research is sought to be nuanced by alternative explanations. It was project leader Siri Wormnæs who was the gate opener to this field of educational research (Silverman 2001) and who assisted in the proceedings of the research process. Too close a tie between a commissioner and a researcher may in

⁴⁹ The Data Inspectorate, an independent administrative body under the Ministry of Government Administration and Reform, was set up in 1980 to ensure enforcement of the Data Register Act of 1978, now made obsolete by the commencement of the Personal Data Act of 2000. The purpose of this Act is to protect persons from violation of their right to privacy through the processing of personal data. The Act shall help to ensure that personal data are processed in accordance with fundamental respect for the right to privacy, including the need to protect personal integrity and private life and ensure that personal data are of adequate quality. For this project formally attended to by project leader Siri Wormnæs.

principle lead to a slanted presentation of findings that may favor the commissioner's viewpoints. As a precaution it was decided to limit the contact between project leader and the master student responsible for this study after the practical part of the study was finished. To ensure the quality of the study from another ethical point of view, the results of the study will be given as informational feedback to the participants of the study, partly through an English version of the master thesis possibly come winter 2007/2008. In the light of what has been said earlier about method, perspectives and approaches, using a method of analysis based in renowned theoretical basis and method will also be a way of ensuring ethical quality of research.

Summary

The research design of this study is a qualitative exploration where the object of research is seen as an embedded case. The practical method of analysis is discourse analysis. This chapter has described and discussed methodology and ethical considerations concerning collecting data. The empirical material that has been collected in this study will be presented throughout the next chapter, using a three dimensional analysis of discourse.

4. Empirical data: A discourse analysis of empirical data

"...important changes are taking place in language education and training in Britain (and I imagine elsewhere), for example, in the new national curriculum for schools and in the 'communication' elements of prevocational education programmes which seem to be closely linked to technologization of discourse" (Fairclough 1995:110).

The objective of this chapter is to give a description of the empirical data that has been collected with the research question as a point of entry. This chapter presents an analysis based on three levels: 1) conversations as text 2) conversations seen in the light of situational context and discursive practice and 3) conversations and technology viewed in relation to socio cultural context. To show how the different dimensions interconnect, the presentation is given through description, interpretation and explanation in the light of consecutive reflection, analysis and discussion. The chapter is structured so that chapter 4.1 deals with the text analysis describing and interpreting the conversations in a continuous process, while chapter 4.2 and 4.3 aim to explain some aspects of the conversational sequences that has been presented in chapter 4.1.

4.1 Text analysis of conversational sequences

"Interaction is always a tentative process, a process of continuously testing the conception one has of.... the other" (Turner 1962:23, cited in Suchman 1987/1994:118).

The analysis of text is a tentative process in much the same way as any language interaction. One continuously tests one's understanding of "others" and what happens in the interactions. In chapter 2, interactions in conversation were described as process, dialogue, construction of knowledge, pragmatic meaning making and learning arena. In this chapter conversations are presented as *text*. The term text relates to written or spoken language within a discursive practice, which is a broad understanding and definition of text (Fairclough 1995). Metaphorically speaking text may be understood as something that: "... emerges, comes to surface, gets to be

known, visible, audible, or may be sensed” (Ongstad 2003:98). This chapter shows what happens in the student conversations, based on transcribed exchanges in the conversations. Sequences and episodes are analyzed in light of the perspectives given in chapter 2 and 3. This involves how and what the students negotiate through the use of TFA (Teachers for all) as a learning resource.

4.1.1 How is knowledge and meaning negotiated?

The text is characterized by a configuration of heterogeneous and contradictory properties; involving for instance what ”events” occur in the conversations, in what way they occur. This then deals with the content and structure of the conversations. The focal points of the travel along two axes: 1) what do the students negotiate in their conversations? And 2) in what way do the negotiations happen? The analytic element is tied to presuppositions about why things are said in the way they actually are. The presentation⁵⁰ is organized by showing three main excerpts that are deemed representative for the student conversations. The account then shows shorter sequences sorted into different categories of negotiation.

4.1.2 ”The White Cane” Text extract 1

This excerpt from the text opens with a misunderstanding by one of the students concerning the concept of ”The White Cane”. The participant misapprehends and believes the conversation is about *sugar canes*. The negotiation in this conversation firstly involves finding out whether this may in fact be correct, and that the question rather is concerned with the white cane that visually impaired people use when moving about when being outdoors. A shift in the conversation occurs after this is cleared, and the students move on to discussing the content of the term autonomy. This first sequence is probably a negotiation about understanding language, since it’s not the cognitive content of the concept of the term ”the white cane” that is put up for

⁵⁰ The citations from the empirical data in this study are presented in a different font and style than the rest. This is primarily done to keep correct notation of breaks and inputs in the sequences. This is also done to better the viewing of each sequence as a whole unit. It also marks a necessary divide between the text and the empirical data.

discussion and being cleared. As the conversation moves along, it is clear that the students all recognize the utility of “the white cane” for people with visual impairments. What happens here is an element of “grounding”; to establish something as a part of a joint comprehension in a way that serves present interests (Clark 1996). Thematically the students keep to the given assignment. The students end the conversational episode when the topic is “emptied”; That is having reached a joint understanding of what they are talking about, what they mean and how to understand the concepts involved. This then, is negotiating knowledge and construction of concepts. Topics are tied in with identification, personal autonomy, personal courage and self efficacy. The white cane is viewed both as a symbol and a practical aid for social participation in society. The text extract follows here:

“The white cane”

E: ((Reads the assignment)) It has been said that the white cane is a symbol of personal autonomy of the person who uses it in his or her daily life. What is meant by that? Read the Dakar Framework of Action and the Salamanca Statement and discuss your interpretation of the commitment and intentions concerning education for learners who are multiply handicapped. (# 5s) The white cane is that plant that make, people make sugar out of it?

F: No, no the white cane the one, the one which, the blind use to, just to move or to for mobility (.) that is=

G: [No] [(.) for the blind]

[yeah] [yeah]

E: [Ah, that]

F: =their identity, the stick, it's their identity, yeah, you can identify any person who is having that by the=

G: [the stick] [yeah]

E: [yeah, okay] [the stick] [identity] [ok, ok, ok] [yeah, yeah, yeah, ok]

F: =just as I (.) blind (.) white cane, just as I can (...) white cane

G: [yeah] [yeah]

E: [Ah] so that's the name (.) I didn't know, I, I, I was, I just related to the sugar cane.

F: ((overlapping)) [sugar cane]

G: Ok

((The group laughs in unison))

The person wanting a clarification is signaling actively by overlapping and back channeling that he or she has understood what the white cane is about. The misunderstanding is cleared up and the group continues a discussion of what the white cane symbolizes. The participants' opinion is that the cane serves as an identification marker for the blind:

F: That's their identity, when you see them, you can say (.) for mobility (...) in the (...) or something=

G: [for mobility]

E: [yes, yes, for] [it's like (.) it's like a sign]

F: =they are blind; you can identify them, that is (.) yeah, you can identify them, that is (#3s) a symbol of =

G: [yeah]

E: =persons

E: [you see it and you know]

G: ((*reads the assignment in a low voice*)) [So they] say the white cane is a symbol of ...

((*voice fades away*))

F: ((*continues the sentence, overlapping G*))

[symbol of persons who

uses in his or her daily lives (..) they are using the white cane that means that is the help for them for mobility, and you can help them at any time, for in traffic in real, for example, in the roads, if the car is coming towards them, if the driver is seeing that white cane, he can have awareness, he can help them, and if the blind is moving here and there with the white cane, you can identify him, and you can give him help=

E: [Yes] [yes]

F: =walking, because you can see (..as) blind. That is the symbol for me.

Here the group has made a joint conclusion or agreement that the white cane may be seen as a symbol, from this point the conversation moves forward into a discussion about why “the white cane” is important in the lives of the visually impaired. The participants argue that the cane makes blind people dare more, that they may move more freely with it. Furthermore, the cane is also a signal to the seeing, so that they may be able to help, one of the participants argue. The conversation returns to the topic concerning the symbol function of the white cane. It becomes obvious that the topic is not exhausted yet, and that this is tied to the question about the autonomy of the blind. The responsivity is directed towards earlier utterances. There is some overlapping by the speakers and back-channeling happens:

E: Yes, and there is more than that, I mean, I question, people that use the blind cane they dare more, they dare going out, and walking in the world, they don't see it; they dare more, so they are brave.

G: [Yes]

F, G: ((*in unison*))

[yes]

F:

[Substitute the=

=vision]

G:

[They]=

=have the courage to go out.

E: Yes, they have the courage, exactly.

F: The courage of the (..) it's just substitute for vision, before they go to travel before any obstacle, that white cane can just search out the problems on the ground, you see, it's apart from them, and it's searching for any obstacles, but it's also a symbol of the autonomy (.) of that person, it's a symbol.

E: [Yes, yes, exactly, and that's]

[of their autonomy]

[personal autonomy]

F: It's a symbol.

E: Yes, yes that's true.

Here it seems an agreement is reached about the cane as a symbol of personal autonomy. The conversation moves on, delving into what functions the cane has and what advantages this may give a blind person, most of all this gives the possibility of

social participation; *a participation in life*:

G: It's like trying to explaining that they depend on it, they can, they can not work without that white cane, if maybe they get used to it, (....), they get to, so much that they can not do without it.

E: But beside that, I mean if you see a person using a white cane, that means it's indeed autonomy; they go out, they walk, it is the sign of their participation, social participation; life participation.

F: Part of their life.

E: Yes.

F: And it is a symbol. A symbol means we can identify them. Part of their (..) life means, it's just a helper=

E, G: ((affirms simultaneously)) [Yes]

F: = of them, it's outside of them to search out obstacles. I can understand that.

E, G: Yes.

The early sequence at the start of the conversation dealt with clearing up the misunderstanding connected to the term "the white cane" versus "the sugar cane". After resolving this, there is a shift in the conversation towards negotiating what kind of symbol function the white cane has. In this discussion one senses that the white cane is evaluated from a "seeing perspective", a view one might call "a sight imperialist us and them" conception of the blind. Blind people's identities are here tied to what is in fact a mobility aid; and here it probably serves as a means of constructing "the others" in the conversation. The cane as a symbol in the sentence about the "us" to help "them" when we see it, points towards this. The students might for instance rather have discussed a contrasting discourse that blindness may be seen as a *property* (quality), where using hearing and sensing may give the opportunity to construct a fully valid and equal perception of the world the way for instance Keld Stochholm (2005) does in his book "The road to blind understanding" ("Vejen til blind forståelse"). As such, this is a conversation, then, that has its starting point in what we might call a *normality discourse* versus another possible "impairment" discourse. At the same time the concept of "courage" enters the conversation as a topic, involving the courage that is demanded of the visually impaired to be able to participate in social life. A positive identity is constructed during the conversation of the visually impaired. A shift happens after the short break and the group points to the ideal of *equal rights for all*, impairment or not. The conversation continues:

"Equal Participation"

G: Maybe what we are talking about is education for all, equal participation, even if a person is blind; he=

F:

[Yes]

E:

[uhuh]

G: =has got the same rights, human rights, and they should be according to equal education, equal participation, equal access to everything, even if a person is blind, he should not be left out because of the disability, so I think that the Salamanca Statement of framework is trying to include everybody.

E: Yes, and it's...

F: [And] also inclusion, inclusion is the main target for the Salamanca framework, you see, the blind, the visually impaired students, and the regular students, or sighted students should be participating; any handicapped should not be segregated, it should be included in the class settings, and the curriculum, everything should be included; these visually impaired, any handicapped students that is the main area of this Salamanca (unintelligible).

G: ((low voice)) (unintelligible).

Here the conversation moves into *rights*, as given in the task question in the learning resource. The group quickly reaches an agreement about how they understand the Salamanca-declaration: equal rights for all. The conversation dies down until the last words become unintelligible and stops. The topic is exhausted and it seems like the students have reached an agreement since they continue to click themselves further on in the learning material. The way the question in the material is put steers the direction of the conversation, and at the same time the students continue to negotiate meaning and understanding; to reach a joint "common ground" as given in the setting. The conversation dies down and we get what is called a "closure" (of the topic) when a joint understanding is reached.

This sequence is typical for all the conversations in this study in several ways. First of all there is a negotiation about how to understand terms, concepts, words and topics, and this is cleared through language signals until a degree of agreement or understanding is achieved. It is the learning resource (TFA) which sets the agenda through the forming of problem or task questions, and we see that it is the one chosen as a chairman of the group who keeps the floor in the preliminary conversational sequences. Secondly, the conversations occur with a great degree of friendliness and approval of the other participants, with an active use of back-channeling and support. Discursively speaking the participants stick to the universal and ideological conception of the terms inclusion and visual impairment, although practical experiences are shared and taken into consideration.

4.1.3 “I liked the idea of including” Text extract 2

This extract from the text involves the discourse of inclusion, and negotiation happens on several levels, including negotiating the comprehension of ideologies. The students here transcend the frames of the learning resource by discussing what they spontaneously think, feel and mean after viewing the video material. The conversation occurs after the given assignments (study questions) have been discussed. The conversation passes on several levels, and several topics are introduced; challenges, attitudes towards people with impairments, the need for sharing experiences with blind role models. It becomes clear during this sequence that it is the “ideal” of the concept of inclusion that the students negotiate in terms of understanding, but it also involves the way inclusion is presented in the video:

“I liked the idea of including”

A: I liked the idea of including, or inclusion in the school, yes there could be some challenges that I noticed, but I liked the comments, you know, about the people that are experiencing the inclusion setting, some guy talked about attitudes, the likelihood that attitudes will change positively, and is not a seminar kind of, that HEY, do this and that, it's experience, you change with the experience, you are given an opportunity to gradually change into positivity, I think that was good. Yeah.

D: That's cool, that's very good. I think you can recommend that half of the children or (...other...) are blind or have – um, some visual (...) impairments, there is a lot of children the same.

A: It's nice conducive, instead of having one, you know when you are more than one with a problem, with the same challenge you tend to share the experiences, and you feel comfortable that it's not only me in this type of world.

The utterance: “I liked the idea of including” is ambiguous. The word “liked” expresses something positive, both in relation to what has been watched on the video, but also in relation to the ideological perspective per se. This might be an intertextual reference to the learning resource. The participants here deal with the ideological content of the inclusion of the visually impaired with a reference to the video they have seen, and the utterance may be understood quite literally; the speaker *liked what was said about inclusion in the video*. The fact that the participant uses the word “liked” in the past tense may point to the fact that it is the video's perspective that is discussed, not the participant's own personal opinion on the discursive ideal of “inclusion”. Secondly this utterance may entail an implicit *but* (in meaning) which does not get completed in a full sentence. “Yes, I like the idea of inclusion, but in practice (real life) it is different “ may be such an interpretation. This last

interpretation might get support from what evolves later in the conversation. The participant here mentions that there are challenges, but that it is a positive thing when experiences with inclusion undoubtedly will lead to a change of practice. This is supported by the next speaker, who feels that it is good thing to get the visually impaired to meet others with the same impairment, so they might share experiences.

The idea of *liking* or *not liking* inclusion as phenomena is probably farfetched in the dominant discourse of inclusion in Special Needs Education in Norway; where inclusion today appears as a necessary political and social ideological basis of understanding ⁵¹ in this field (Skogen and Holmberg 2002, Djupedal 2006) (see chapter 4.2.3). In Norway the inclusion discourse is the dominant one. That the participant here says: "I liked the idea of including" *explicitly* may suggest that there are rivaling ideological concepts in the participant's home country; or what may be called contrasting or competing discourses.

The conversation alternates between levels and layers, and shifts occur along the way; there is talk about what appears in the video, there is talk about ideology and there is talk about practice in real life settings:

- C: [And all attention] on us – on only one of us
 ((Unintelligible turn because everyone speaks at the same time, and the air raid testing alarm is suddenly sounding.))
 A: Yeah, so it's good, yeah.
 C: But I realize from this (.) that the size of the class is very (.) I mean the size of the class is too much, so many people in the class, and four or five people have to share a table.
 B: ((laughs)) [yeah]
 A: [In a small class] [yeah]
 A: Did you see they were too much squeezed? And this big machine, um, I don't know what you call it, HAH, it was very noisy, and it's big that the person using it does not have space, to type and=
 B: [Ah, yes]
 A: =I think, I think those are some of the challenges that we have in most of the developing world today, in Uganda, sometimes it's (.) it irritates, eh, it makes the teacher go crazy.
 ((Laughter in the group))

On the practical level the challenges are described. The participants have hooked into the first speakers key word challenges and expands this by an intertextual reference to

⁵¹ The present Minister of Education Øystein Djupedal held a speech 28.03.06, where he stated: "Equal (fair), inclusive and adjusted learning (individual adaption) are superior principles in Norwegian schooling" (Djupedal 2006).

what has been watched on the video (see chapter 4.3). The first participant expresses the lack of space (for the pupils on the video) and the disadvantage of the noise that the machine makes in a very distinct way ("HAH") through intonation, emphasis and loudness of voice. The way of expression and the strength of the utterance give a "charge" of values. The large number of students in a class is considered a problem, as well as the noise of the Braille machine. The sequence as a whole (from the initial utterance) involves what may induce change, and that change is based on experience. The conversation is then augmented to involve possible explanations for the challenges to be what they are in practice:

"We don't have any in ordinary schools"

B: Due to economical problems, maybe.

A: Yah, yah.

D: But I don't know any blind person in my country that is included in ordinary school.

C: So what kind of disabilities (...)?

D: Physical and some others, but blind and visually impairments, ok, but blind persons, I don't know any, I don't know, maybe there are, but I don't now.

C: We have

A: [We have]

B: We don't have any in ordinary schools.

The students have here probably negotiated agreement or share a joint agreement on the opinion that inclusion is desirable in principle, but difficult in real life, in practice (see the chapter on inclusion) , especially from an economic point of view. It would probably be very difficult for the participants in this setting to point out directly that inclusion is not an ideal objective, if by any chance that was their honest opinion.

One participant points to the fact that is not common practice to include children with visual or other impairments in his or her home country. One might consider that inclusion is unfamiliar to the culture in question both as ideology, discourse and practice. The first and the last utterance points to the video material as a joint point of reference:

"I hope"

A: So this man you saw, the big man, the big blind man, (.) I think that's good, yes?

D: It's really good.

A: It's good for the little children (.) to know that they can one day grow up into another (..), and life is, there is life after the end of the tunnel, you know? Yes, it's nice and then of course they are the ones, who know, the issue, the real issue, the real challenges, they should be given a room to educate or to share the experiences with the young ones.

B: Yeah, and what impressed me a lot, is that I, I saw every like handicapped child, they have ordinary child help them, together, yes, one by one by one, that's really a very good relationship, I think, and I, it helps the children with the disabilities, and it also helps those ordinary child, they can feel something different and then to love people and some thing. It's really good. I hope in China, we will have this kind of try, one day.

((affirmative sounds from the other participants))

The fact that the participants here express that inclusion is a desirable objective may indicate a true belief; they adhere to and agree with the principle of inclusion. On the other hand, however, this “joint” or agreed utterance might just be a result of what it is possible or not possible to express within the discourse dominion in this institutional setting (in Norway, see chapter 4.2). It is not possible to make any inferences about what lies “behind” (or beyond) the utterance, because it is the setting and the context that decide what is pronounced. This phenomenon is relatively typical for all the conversations.

4.1.4 “Uneven Gender Distribution” Text extraction 3

In the following text except the students address major issues concerning the gender distribution of children with disabilities in their respective home countries. Cultural understanding is expressed between the participants and they put the question of inclusion in a socio cultural perspective (see also the next chapter):

“Uneven Gender Distribution”

A: Ok, Would you like to read that?

B: Oh, (.) ok, ((Reads the assignment aloud)) Reflections and discussion: What may be the reasons for the uneven gender distribution of children with visual impairments in the inclusive schools? There were 19 girls and 38 boys.

A: Um, yeah. Why do you think it's like that? I think this is what we are supposed to guess or to think about.

C: So this is about the document (..imperfection..) And gender issue is really relating to cultural issues

A: [issue]

C: So can you explain some things about the gender issues in African countries?

The speaker first defines her own understanding of the gender issues as a culturally defined phenomenon, something that according to the speaker is marked by prestige, which again is connected with resources. Following this the speaker asks the other participants of their opinion on the subject:

A: Yeah, yeah, I would say that, um, education per se is a kind of a prestigious area, something that

is very much treasured and it costs in terms of finance and time, and not only in this school, but you'll find that in many other schools, in Africa and in Uganda in particular, you find more boys being favoured for education and or other career than the girls would, so I wouldn't be very surprised if it even goes across disabilities, it may not be , um, I'm not sure, but it may not be true that there are less blind girls, than the boys, it could be that there could even be more blind girls than the boys, but the need for education (.) culturally it's (..possible..) that boys should be more educated than the girls (.) second class for example, that's it's not.. only my own opinion.. It's shared by many others, huh.

B:

[yeah]

B: So some girls just stay at home?

The other participant answers by giving a longer explanation, and holds the floor until the speech turn is caught by the third participant. The third speaker's question encourages a deeper discussion of the topic, and the first speaker takes the cue:

A: Yeah, educating a girl is not a big issue. It's sort of a (.) gender is another kind of group that should fight for its rights that has been oppressed for some time. It's also among the special groups that have to raise up their voices to achieve some=

B:

[Yes]

C: [mm]

A: =(.....things)

B: [mm, yeah]

The speaker keeps the floor and the listeners overlap by back channeling and giving signals of joint understanding. This shows that the participants in the group most likely agree that there are cultural causes for the uneven gender distribution in inclusive schools (see chapter 4.3.2 and 4.3.3). Through the conversation they have negotiated meaning and reached a joint understanding that women are in the group of people that must fight for their rights, much as persons with disabilities. This might be an expression of an implicit understanding of the similarities between the disabled and women as a group. In a discourse analytical perspective it is important to point to the perspectives on power that here is explicitly expressed; both that women and people with impairments in this verbal exchange are seen as oppressed and have to fight for their rights. There is a probability of competing Tdiscourses for women and men when it comes to inclusion, when viewed in relation to what is said by the participants in the sequence "Next to a dream", below.

4.1.5 What kind of negotiation happens in the conversations?

Negotiating topics

The students address the topics that are presented in the video sequences and task questions, but they also extend the frames of the learning material. The following

example describes how the term inclusion is understood discursively in a conversation that occurred after the students had reached a closure on the topics given in the assignment. This event entered as a spontaneous "add-on" after the topic was exhausted:

"They want it to be called inclusion"

E: Do you have, in your countries, such a (unintelligible), schools with blind people?

G: Not many.

E: Not many, but there are?

G: Many of them, but the (unintelligible) we still have special schools, but (..) plus the biggest member.

E: In my country there are only special schools with blind people.

G: Because today they want, actually they, they said, that, the law, I mean, it's not just the law, it isn't a law, as such, but it's like they want it to be called inclusion, and yet, oh, actually if I, I mean, if I know the school, I know that the children operate from the special class, and sometimes they get integrated, now they do not (...) it to be called integration, they call it inclusion, but actually, it is integration.

E:

[Inclusion, yes]

Here the content of the term inclusion is contrasted to the term integration (see chapter 4.2.) The speaker searches for words or concepts that may be used to explain the content of meaning in his or her comprehension of the term; the person in question speaks of it being a "law" but not a legal law as such that decides that the education of the blind must be organized in a particular way. In the Special Needs Education discourse the word *inclusion* is used as a norm and an ideological standing point, even if there is knowledge to the fact that this is not always "true" in a practical sense of the word. The student show that they are aware of the ideological and discursive foundations of the two terms (see chapter 4.2.3), and the conversation continues:

F: Can it fulfil the way of agreement?

G: Of course, if you understand inclusion, it doesn't. Because if you say inclusion, the help should be in the class, I mean the whole of the time, (...) yeah, in the regular class, I mean full time, but they don't, they are not in the class full time, they operate from the special class, so they are incl(..), I mean they are integrated on some, in some subjects (...) not all, so yeah, it's a matter of integration, but it's called inclusion.

E: Okay.

The slip of the tongue: "incl-" that is cut off may tell us that it is easy in everyday language to treat inclusion and integration synonymously, but the cutoff here also tells us that the speaker is aware of the difference.

Negotiating understanding

The students here negotiate an understanding of demographical distribution of visual impairment, and find that this is culturally decided:

"So it's something cultural"

E: Ok, so it's something cultural in particular to Africa, this difference.

F: [Cultural] [And therefore] reflected in the visual impaired students, also sighted students.

This conversational episode is an example of clarification, because the next sequence the speaker follows up his utterance by saying: "but just asking". From then on they explore whether there may be other explanation variables behind the cause of gender differences:

E: Could be any like (.) demographic distribution? I mean the (.) male with visual impairments are more than girls with visual impairments, or something like that?

G: You think so?

E: Mm?

G: You think so?

E: No, could be, but just asking.

G: [Mm?]

F: It can be, but not that, that's because of cultural barriers. Because if you see visual impaired=

G: [Mm, yes]

F: = in totally, if you see visual impaired, they're exported to the outside, they can be bigger, are they bigger or more in numbers, the boys, they are culturally exported, than females. And females are just kept in the room in the house, with the parents.

E: Ok.

G: To do household chores.

F: Yeah.

The response on the answer shows that the group most likely will reach an agreement on the understanding of causality; there are cultural factors that decide the gender differences. By the "Ok" it is signalled that the introductory question has been answered, and the "yeah" possibly expresses agreement on an assertion level. The speaker G affirms this by confirming that girls are kept at home to do housework. This may be seen as a confirmation of the participants joint understanding of this topic..

Negotiating meaning and agreement

Her diskuteres det hvorvidt blinde kan konkurrere på lik linje med seende. De tar opp hva de mener med multiple handikap og forholdet mellom de som er kjappe til å lære kontra de som ikke er det i skolesammenheng. Sekvensen viser samtidig at

studentene forhandler om enighet:

“Competing favorably”

A: Ah, yes, this one (.) The next one (.) um ((Reads the assignment aloud)). The headmaster said that he was happy that the blind children in his school were competing favourably academically with the sighted children. Would you suggest that blind children should go to schools even if they are slow learners or multiple um (.) handicapped? Um, would you say yes, so?

C, D in unison: [handicapped]

C: Yes, of course.

B: ((nods)) Yes (nods and smiles)

Agreement between the participants is achieved immediately, shown by affirmatives and gestures. The group negotiates agreement quickly when discussing the question whether blind may attend school in spite of their having multiple handicaps. There is an immediate acceptance of one of the student's utterances and this may be seen as a joint expression of agreement. The overlapping of utterances, support this assumption. One of the students expresses why in the next sequence, and the group follows up this reasoning:

D: [Like] others. Disability or no disability you go to school – slow learner you go with the school.

B: [yes you should go to school]

A: Yes, because if you are a slow learner, then that means that you have a capacity to learn something, anyway. So, we agree -

B, C, D in unison: [yes] ((smiles and nods))

A: - we surely agree, um (.)

C, D: [Yes, mm]

B: They should get more support from the teachers (..) students.

A: [mm] [mm]

C: But this would be very more difficult for (.) to the multiply handicapped.

A positive outlook is expressed here: if you learn slowly, this in fact means that you are in fact able to learn. The students agree on this. After this event a shift in topics occurs when one of the students wants the viewpoints of the others on the term multiple handicaps. The participants answer:

“Don't just generalize it”

A: Yeah, multiple, I wonder what they really mean by multiple handicaps.

C: Maybe it has more than one kind of disability, maybe deaf, blind or both physical and blind=

D: [mm]

C: =more than one kind of disability, I think (.) In this day it is very difficult, in my country, if you have=

D: [unintelligible]

C: = more than one kind of disabilities.

A: But it is also important that somebody knows what is (.) multiple handicaps, so you don't just generalize it. If, uh, I have a physical handicap, see, and then am blind, that is multiple already. But then, should I not have education? I should. And (.) there is always something to learn, I think. The

cross challenges, especially when it comes to maybe the intellectual disabilities plus, plus, plus others, it may be a challenge.

The participant points out that it is important not to generalize people with impairments, and that the right to partake in education stands without regard to multiple impairments. At the same time it is not put up for discussion that blindness as an impairment often is accompanied by other difficulties or handicaps (see chapter 4.2.4). The group turns to the discussion the challenges that teachers experience when teaching a non-homogenous group of pupils. "Plus, plus, plus" is strongly accentuated and this may be a signal of the underlying "charge", laden with emotions, norms or values. A shift in the conversation then occurs; and the word "challenge" possibly triggers new chains of reasoning connected with the teacher role and what is demanded of a teacher when teaching pupils with impairments in an inclusive setting. It may be read from this sequence that the participants are aware of the "ideal" tied to the reasoning behind the concept of inclusion, but that the real challenge is to reach this goal in a real life setting (the everyday reality that is culturally decided). Here lies the implication that there is a difference in the understanding of ideal matters and practical ones.

Negotiating non-agreement

In the following excerpt the students discuss the relationship between inclusion from kindergarten on and to teach children with special needs outside the frames of a "normal class". They start the discussion on how to prepare the pupils for a life in the normal class and end up in a genuine disagreement about an ideological basic understanding of the concept of inclusion the way inclusion ought to be practiced. The conversation moves on a normative level:

"I really can't agree"

C: It has come up another issue, of when prepare for what children, normal children without disabilities, as well, I mean they have to be, um, talked to in advance that they're with children with disabilities, study in their class, something like that, maybe. I mean children without disabilities they should be well prepared in advance about the attitudes, about the awareness, something like that, to accept the friends with disability into the class.

A: In the classrooms.

D: [But] if they start in the kindergarten, from the beginning to be enclosed with the others, then they, I don't know, but I think that they have to grow up with the others, with the same possibility, just they need a more support, a different kind, uh, to have to come to them, teach them

or learn them. I think that it would be better to start with the others. Ok, preparations but, you what with preparation – every=

B: [mm, yeah, but I think]

D: =child needs some kind of preparation for the school, new situations.

This opens with a statement about children needing to prepare for schooling. The next speaker does not address this, but returns to the challenges that inclusion puts on the teachers. As we will see, this is probably a "detour" to explain why inclusion is not always possible nor always to be desired. At this moment the differences in ideological perception and reasoning appear, especially where B states that for some lectures those that are impaired ought to be taught separately. This provokes whispering while the other speaker keeps the "floor":

B: Yes, but I think inclusion really puts too much on teachers, because in practicality it is really very hard to give lectures both for those students with disabilities and the normal students, because the normal students can get more information if they (...) ways out, the students with disabilities in the classroom, they should have got more information during that lecture.

D: You mean (ex...ctly.)

B: [Yeah, I think that] for some lectures maybe they should be separately taught.

D: [I don't agree] ((whispering))

C: [Yea, I also], yea, I also can't agree.

D: [I can't agree].

C: I can't agree with you because because, and I also don't agree with the idea of competition here.

B: [Yeah] ((nods))

D: I think that I just want to say just that they can, same like other.

In the course of this sequence the students do not reach an agreement on what they consider to be correct. There are, however, several degrees of agreement within the conversation, because the conversation moves on several level simultaneously: ideally, practically and thematically. There may be several explanations for this. It may be because the students have differing understandings of what is demanded in different situations for inclusion to be fulfilled. There is a possibility that the students talk "past each other" (a surface disagreement), but it may be that cultural differences and ways of understanding makes this into a true difference of meaning; based on inclusion discourses and ideologies that are specific to each participant's culture. The conversation, however, does not stop or wither; it moves on even if a polarization has happened. At the end of the conversation sequence one of the students addresses a topic that they have discussed earlier; that is competition ("Competing favorably") between students. The conversation returns to the topic of competition and serves as

an intertextual reference to earlier speech turns and to the question asked in the learning resource. The student explains:

”Competition”

C: Because competition among student are (..bro her back reason t..) in my country already. We all go to the class with the idea that we have to compete with other student to be number one in the class and in the position of a child with disability they have the awareness in their mind that they are slower than the other student and if they have to come to the class to compete, with other friends and they know that: “No, I cannot do that”, because their awareness tell them that they would be slower than the normal children for example. And so: Because of low self esteem and they don’t want go come to class any more if they know that they can compete with other student.

A: Yeah, I think so.

The question here was concerned with the possibility of the visually impaired being able to assert themselves favorably academically and intellectually in the same way as people with ordinary vision. The term competition is taken literally. This is interesting in the light of language; the students speak a language they may be more or less fluent in. The concept of the words, or what one might call the content of meaning in the concepts may be different in the languages in question, and the understanding springs from cultural knowledge and social practice. When you in Norway ask whether blind children may compete with children with vision intellectually; a different meaning evolves; this is not about the “competition of being the best student” in a literal sense of the word, like one of the students do here. It has more to do with an enquiry of whether blind people may possibly learn in the same way as everybody else. We see here an example of how the questions are asked in the exercises will influence the way the students answer.

Å forhandle om man skal snakke mer om noe:

The students negotiate here about whether or not to continue talking about a topic, they negotiate whether the topic is exhausted or not. Besides this the students address a topic that crops up spontaneously without being given as an assignment in the learning material:

”We have something to share”

D: Do you want to continue?

A: Yea, I really liked the (.) idea of having these children

D: [Sorry, I] didn’t read those things

A: No, we are not reading this=

- D: [last discuss..]
 A: [= like we have] any other (.) like she had (.) I think (.many.) we have more we would like to say about what we have seen.
 C: [yeah, because we come from different countries so if we have something to share.

The students agree to continue even if the question has been answered. This may mean that the material triggers engagement and motivation in the students. The conversation moved onto discussing the term inclusion and its ideological content. The discussion here enters the dominion of inclusion as discourse (see chapter 4.2.3).

Intertextuality and norms of politeness

Intertextuality refers to pointers within the conversations to other persons or events outside the conversational context. Such a reference here creates some laughter, but norms of politeness enter (chapter 4.2.1):

”Next to a dream”:

- C: [So to] a great big stand is really similar to our cultures, so education in the awareness of=
 A: [look]
- C: =the parents (.) education for girls is not worth it in comparison to education for the boys not only children without disability, but maybe children with disability is a more serious problem, um (.) but I asked you this question because, um, I attended the winter seminar with N.N, he also comes from [named country], and he said that actually now the gender equality in [named country] now have to focus on the boys, because the number of boys at schools now is less than the number of girls in [named country], so he says that when we’re talking about gender equality in [named country], we should focus on boys, not girls.
- B: [huh] ((small laugh))
 C: [so how] can you explain= about this? ((Small laughter))
 D: ((chuckle))
 B: ((chuckle))
 A: ((chuckle)) I don’t want to disagree with my (.) mm ((cough)) countryman, but unless proved so, I would not agree, I’ve not really seen it any of the schools, that girls are more than boys, it would be very surprising, but if he said so, then he may have (.) information pertaining that, or such a report, but that would be very=
 D: [experience]
 A: =doubtful, even you go at the university and get in any of the faculties, you get less than a half, but what I agree is that the girls, the number of girls is now increasing, the ratio is not as wide as it was before, it’s (.) at least the gap ((hands showing a gap diminishing in a gesture)) is reducing, but to say that we’re over passing -that is next to a dream.
 C: [Yeah, okay, mm]
 B: [mm]
 D: [mm]

This involves the understanding of gender perspectives and inclusion. Through the reference the discussion of gender is accentuated; and the students are laughing because norms of politeness demand that the speaker does not oppose N.N when he is

not present (see chapter 4.2.1). They probably also laugh because they clearly can see that N.N's perspectives are colored by his own gender and of the dominant or generally "accepted" discourse in his own country; a country where boys usually get priority in education. The sequence shows that the students offer respect towards one another, but that this does not hinder the expression of diverse meanings and viewpoints.

Summary

Through the text extracts we see that the students negotiate knowledge and meaning through establishing a joint space of understanding, where concepts and basic reasoning are included both ideologically and culturally (for instance "I liked the idea of including"). The continuous establishing, developing and repairing of such a joint comprehension is a practical matter for the participants (for instance "The white cane"). They say to each other: "We have something to share". This is a practical understanding or what might be called a pragmatic inter-subjectivity that is created and developed within and during the interaction itself. From what the participants themselves see and mark as a joint understanding, the analysis shows that both expanding concepts ("Uneven Gender Distribution") and "closures" ("I can't agree") of the discourses happen during the interactions. What is negotiated is: meaning, understanding concepts, agreement and non-agreement, topics, cultural and ideological understandings, and also what is going to be talked about. Views on situational context and discursive practice may explain why this is so, and an account of different factors is presented below.

4.2 The conversations seen in the light of situational context and discursive practice: Explanations

Subjects are ideologically positioned, but they are able to act creatively and make their own links between those practices and ideologies they are subjected to, and they are able to reconstruct those practices and structures that position

*them*⁵²(Fairclough 1992a:91 as referred in Jørgensen and Phillips 2006:87).

Discursive practice is how a text is produced and interpreted (Fairclough 1995). This must be viewed in connection to the socio cultural practice, conventions and orders of discourse that the discourse itself is a part of (Fairclough 1995). The situational context is given by a setting of cultural diversity. This chapter addresses possible explanation variables on what happens in the conversations viewed from perspectives of situational context and setting, in the light of discursive practice, institutional and societal conditions.

4.2.1 Situational context and “the event of the moment”

Students meet each other with their own preconceptions, horizons of meaning and experiences from their own life worlds, as is shown in the sequence **”So it’s cultural”**. In this lies implicit and explicit barriers and dividing lines related to professional understanding, everyday knowledge and theoretical foundations. The lines of demarcation may move along the different professions, different occupational experiences and different theories of practice in relation to what is suitable, appropriate and justifiable within the field of special needs education (Lauvås and Handal 1990). The dividing lines may move along global South and North differences or East and West differences that are founded in differences of politics, societal and cultural structures and the access to different kinds of resources. This is relatively clearly expressed in the sequence **”I can’t agree.”** The learning resource (TFL) presents everyday situations and life worlds that are both familiar and unfamiliar to the participants, and in a language they may or may not be fluent in. As international students they are meant to learn both the vocabulary and concepts tied to special needs education, but at the same time they may encounter and learn discourse competence, culture-interactional competence and study competence in a Norwegian university system. This may lead to problems of communication and

⁵² ”[S]ubjekter er ideologisk positionerede, men de er også i stand til at handle kreativt og skabe deres egne forbindelser mellem de praksisser og ideologier, som de udsættes for, og de er i stand til at omstrukturere de praksisser og strukturer, de er positioneret af.” (Fairclough 1992a:91 gjengitt i Jørgensen og Phillips 2006:87)

misunderstandings that demand active clarifications and repairing, as we for instance could observe in the extract ”**The White Cane**”. Within this we also find elements of surface agreement, surface disagreement and norms of politeness⁵³ associated with cultural identity or ”face”: ”Face is the negotiated public image, mutually granted each other by participants in a communicative event” (Scollon and Scollon 2001:45). The concept of ”face” was introduced by Erving Goffman’s theories about *self* (Goffman 1959) and this has to do with the communication of identity. We may also say that ”face” is rooted in perspectives on power (Scollon and Scollon 2001). These elements will enter discursive practice, but there is no room to discuss them extensively here. Language interaction depends on a whole range of competencies that in many ways are specific for the language and the culture one ”talks” in and from (Scollon and Scollon 2001). This leads to possible explanations of the relationship between situational context and discursive practices, in the light of socialization into discourses and the possibility of being able to change and restructure practices.

4.2.2 Socializing into discourses and opportunities of change

Through situations and events we are able to restructure practices (Fairclough 1992a:91, cited in Jørgensen and Phillips 2006:87). By drawing upon existing discourses when meeting new sets of reasoning change is made, but the possibilities of change will be limited by power relations (Jørgensen and Phillips 2006). Those that create a ”text” (broadly speaking as in a conversation or in a video tape) draw upon already existing discourses through *inter-discursivity*. Interdiscursivity refers to the influence of history on a text, and adds to historical development and change (Kristeva 1986). The relations of power also set boundaries for the access to different discourses, as described in the introductory chapter. This may explain that the participants in this study **keep** their own opinions and comprehensions in matters and questions that are deeply anchored in their own countries’ discourse dominions of

⁵³ (*skinnenighet, skinnuenighet og høflighetsnormer*)

what it is allowed to “say” about *inclusion*. One of the participants convey a hope of change, and this probably means that the participant’s own way of thinking has been augmented during the conversation, and at the same time the awareness of limitations in practice in the participants own countries has been *heightened* (for instance like in the sequence ”I hope”). The setting of the conversations is also contributing to the creation of the special needs educational discourse and the positioning in accordance to this.

The setting itself is an educational institution; an international master program at a Norwegian university, where the students still are members of discursive practices in their home countries. The student’s knowledge of what is the expected dominant discourse within the conditions of the conversations relies on their prior acquaintance with each other and on those discursive fields that have been presented to the student body during the semester of educational attendance. During the time they have learned to know each other as group members and individuals, they have together made a former history of the process of establishing ”common ground”. Still, the conversations contain differences in meaning and misunderstandings based on different barriers and demarcation lines that demand the ability of repairing⁵⁴ the conversations. The conversational setting is primarily “Norwegian”, but since the students are participants in the international educational program, the conversations are also part of a global perspective. When the students partake in collaborative conversation groups during the course of study, they acquire joint sets of knowledges, values and ways of acting that are created through joint negotiation and construction of meaning. What happens is a socialization to practice, to ideologies⁵⁵ and to discourses. Students probably negotiate agreement from an overlying *ideal of inclusion*, even if this is not dominant in their home countries. In addition each and every one of the students bring other knowledges, values and possibilities of action,

⁵⁴ A mechanism maintaining the connection between turn designs, speech acts and sequence (Ten Have 1999).

⁵⁵ By ideologies are meant systems of cognition, social practice and communication that are used to legitimate the social actions and positioning within different perspectives of power, in other words systems of discourse (Scollon and Scollon 2001:131)

in other words other discourses that are not necessarily in concord with those of the other students. This analysis shows that the participants are aware of the ideological aspects of the inclusion discourse, but the discourse itself is probably not appropriated. One may perceive this in the text extract **”I can’t agree”**. The joint socialization into the dominant discourses is probably also what makes it possible for the students to enter into a dialogue within the context, together with the discursive context that the implementation of the learning material (TFL) gives (see Mantovani 1996). ”Negotiation” about different elements during the sequences say something about polarizations, agreement/disagreement, concepts, topics and discussion subjects and meaning making, but maybe more specifically these conversations say something about inclusion as a field of discourse. This may be a natural development, since the conversations spring from the overlying subject and focus of the learning material (TFA) that is implemented.

4.2.3 Inclusion as a field of discourse — a world of differences

”...everyone should be able to participate in the community with their own qualifications” (Skogen 2005:85)⁵⁶.

Globally there are several contrasting discourses when considering the education of children with impairments. In the Western countries the development of the special needs education discourse has gone through several phases. Two principles that have been given much weight are integration and inclusion (Tøssebro 2004). Both terms find their educational core in the question of whether children with special needs should receive their education in the company of other children or whether their education must be given in specific institutions or contexts (Ekeberg and Holmberg 2004:26). Inclusion as a term came into use in the 1960s as a reaction against the content of the concept of integration had gotten during the sixties (Dalen 2006). Integration stems from the Latin word *integrare* which means to ”make whole” and to ”incorporate holistically” (Ekeberg and Holmberg 2004:26). The way the term was used could give unwanted connotations about how people with disabilities as a

⁵⁶ *”...alle skal kunne ta del i fellesskapet med sine forutsetninger”⁵⁶ (Skogen 2005:85).*

marginal group are the ones that are "integrated" into a bigger and "normal" community (Tøssebro 2004). Talking of integration was then a way of confirming differences in a discursive practice (Tøssebro 2004). One of the informants in this study expresses the differences between the concepts the following way: "I know that the children operate from the special class, and sometimes they get integrated, now they do not (want) it to be called integration, they call it inclusion, but actually, it is integration". In Norway inclusion is tied to the concept of *adapted education* (adjusted teaching/adapted learning) , and today it is an ideological, political and legalized consensus that every child has the right to be educated after his or her own qualifications within the ordinary schooling system ⁵⁷ (Skogen and Holmberg 2002). It's about the same quality of education for *all* (Bachmann and Haug 2006, Djupedal 2006). At the same time it is also suggested that some pupils best benefit from attending a special school or special class (Flem & Keller 2000, in Bachmann and Haug 2006) and that children with special needs may need more than what the ordinary educational system may offer (Ekeberg and Holmberg 2004:26). The joint right to education for all is expressed in the Declaration of Human rights from 1948 (article 23). Inclusion in a global perspective must therefore be discussed within the objective of "Education for All" as stated by the United Nations (EFA)(UNESCO 2005). Access to free and necessary education, equality, integration and non-discrimination, and the right to a decent education both in content and process is a part of this. I 1994 Norway acceded to the Salamanca-deklarasjonen i 1994 (Bachmann and Haug 2006:88), which gives a framework for education for all children (UNESCO 2005). The Salamanca declaration (article 2) states that *ordinary* schools with an inclusive orientation is : "...the most effective means of combating discriminatory attitudes, building an inclusive society and achieving education for all." Just as important is the opinion on all children's rights concerning education, health and development (as given in article 23 in the Convention on the Rights of the Child, UN, 1989). Inclusion is therefore a philosophical stand point, an expression of

⁵⁷ Jf legalized in the Law on Education (Opplæringsloven 2007)

an ideology where everyone is considered equal, *and* a practical didactic approach to education and teaching. All of this belongs to the ideological discourse of inclusion that the students are made familiar with when being a student at the University of Oslo. The conversations show that the students are aware of these perspectives, and they explicitly separate between the ideological perspective and the practical one. The cultural norms and competing discourses in the different countries enter the discussions especially when discussing practice and this is shown in “the moment of the communicative event”. The students speak from contrasting discourses, where not all get appropriated. This may possibly be viewed most clearly in the sequence **“I can’t agree”**. When we tie this to the introductory chapter which accounted for the concept of the term discourse; the finding concurs with theory. There are big differences in educating all children (the education of children with disabilities too), in the different countries and continents. Discourses of inclusion are characterized by tradition and structure tied to systems of education, political agenda and cultural practice, which also means the viewpoints concerning learning theories and institutional and social practice. The participants in the conversations reported of different practices in their home countries. China and Uganda may stand as examples since there is no room here to discuss all the countries involved. In China, who is a large and diverse country, with several cultures and languages, the schooling is markedly competitive. Arild Tjeldvoll, professor of international educational research at UiO and NTNU, states: “Most parents are conscious of education. From kindergarten on, there is sensitivity towards what the pupils really learn”⁵⁸ The student’s conversations show this view on competition clearly for instance in the text excerpt **“Competing favorably”**. It also appears in an intertextual manner in the sequence **“I hope”**, where the students express that they hope inclusion will be possible in the future. Chinese educational practice is characterized by a traditional subject and teacher centered approach to teaching, one that has been typical of the British (and Confucian) school tradition (Tjeldvoll 2005). Education is free in

⁵⁸ ”Foreldre flest er svært utdanningsbevisste. Fra og med barnehagen og oppover er det sensitivitet på hva elevene faktisk lærer.”

principle, but there is a large number of private schools where all expenses must be covered by the parents or their employers (Tjeldvoll 2005). Classes may be large with up to 60 pupils in each class. This means that children with disabilities are not easily admitted in ordinary schools, they rather attend special schools and boarding schools for the handicapped. Such facts are shown implicitly in the student conversations. One explanation may be that culturally decided ways of understanding makes sure that disabilities are *personalized*⁵⁹ in social practice. This means that the “right” to integration of the disabled or the concept of inclusion in itself “present” in the official discourse as it is in Norway. The discourse of inclusion is probably not dominant or appropriated in the cultural fellowship, even if it may be familiar (“known”) and seemingly appropriated on a global educational political level — as through the Salamanca-declaration. An alternative way of understanding disabilities may be for instance to view existing life as a result of earlier actions in a former life. Charity may also be a reason for giving help⁶⁰ to children with disabilities. The students report that in countries like Uganda, where education is an economic expense for the families, education is primarily given to boys. Classes are large; and may consist of 40-50 pupils per teacher. Families will not chance sending either children with disabilities or girls to the uncertainty of a school. Girls are still needed in the households; as one of the students puts it: “And females are just kept in the room in the house, with the parents.” Similar socio cultural realities and conditions give inclusion an “unstable” placement in the official discourse in different countries. Visual impairment will here be discussed as a field of discourse since it belongs to the video sequences in the learning material (TFA).

4.2.4 Visual impairment as a field of discourse

The following presentation contains the dominant discourse on visual impairment. Visual ability is defined by the limits of the capacity of sight (Lie 1986) in relations

⁵⁹ As a “trait” belonging to the child, may be subject of feelings of shame or seen as a punishment of sorts

⁶⁰ (This is common in China for the education of the deaf, for instance. First politically lifted as a cause after 1996, Signo 2005).

to a seeing normality perspective. A visual impairment occurs when visual problems cannot be corrected (Ekeberg and Holmberg 2001). Children born blind may have the opportunity to use other senses to meet, understand and recognize the world (Stochholm 2005). Within the discourse dominion “visual impairment” some main areas are may be focused on: facts about visual impairments and causes, the difference between blindness and degrees of visual loss, parenting, mobility and self efficacy. To the discourse belongs how to understand the effect a visual impairment has on social interaction. Visual impairments may give difficulties in motor and social development in addition to problems with mobility (Ekeberg and Holmberg 2001). Mobility concerns to main components, orientation and physical movement. Difficulties in mobility may be caused by the visual impairment itself or conditions that may be ascribed the lack of organization and adaption to disabilities in society. It may also be that the child’s environment does not support the child in using other modalities nor to develop personal autonomy (see Stochholm 2005). Educational adoptions concern adequate verbal descriptions of activities and the use of tactile tools or aids. Such aids are important for self efficacy. We mention here the white cane for mobility, and aids for writing and reading like the Braille machine and alphabetical punctures on paper. To develop a positive identity it is important to meet other persons with visual impairments.

This short overview gives enough background to observe that the students catch on to the most important elements concerning visual impairment in their conversations. What came across clearly were the different understandings on this based on cultural differences between the countries. Concerning inclusion of the blind the participant from China stated that he or she *never had seen a blind child being included in regular education*. This may be an expression of both discursive and social practice. To cite from the net pages of a Chinese aid organization: ”Education for the blind in China is not yet well developed” (Hongyu 2007:net page). The participants from African countries had different experiences, as well as did the participants from Eastern Europe. Such differences influenced the conversations, for instance as in the sequence”**I can’t agree**”. Even if the students had different personal experiences, *the learning material gave the students a joint frame of reference through what they*

perceived and experienced from the video. We may conclude that they made their own context of learning by using the TFA material. Spørsmålet er da hvordan et slikt funn plasserer seg i relasjon til erfaringer med bruk av teknologi i utdanning og nyere læringsteori. Dette tas opp i oppgavens neste del.

4.3 The conversations seen in relation to the use of technology in a socio cultural context

”There is a new emphasis on oracy and spoken language education, on face-to-face interaction and interaction in small groups, sometimes explicitly justified in terms of changing communicative requirements in work.” (Fairclough 1995:110).

The learning material that is used in the empirical part of this study influences how and what the students talk about. The influence is made through learning design, presentational form and professional content (topics, subjects and disciplines). To explain what the use of learning technology may bring about, one may research experiences of using similar learning technologies and point to newer learning theories that embrace collective knowledge sharing. This may shed light on the way the students negotiate meaning and knowledge in the conversations through the use of analogue reasoning. Indirectly this might tell us something about the learning material’s potential power as a learning resource.

4.3.1 Collective sharing of knowledge and technology

The use of different kinds of technological learning material involves the use of a tool in the learning environment. This tool introduces signs, symbols and language that is specific for the artifact (Säljö 2006). Using video and task based learning material may then hypothetically be understood as a means of establishing new learning contexts and may maintain, mediate and create discourses within these contexts. It is not the technology in itself that is the starting point for understanding and interpreting discursive practice, but the potentially catalytic effect that the technology may have for conversation and reflection. Learning technology may in such a perspective open up to possibilities of alternative spaces of experience. This presupposes that the

sharing of knowledge happens on a collective level and that knowledge is put to play in concordance with the students' own experiences and understandings for learning to happen. Learning was initially defined as those processes where the individual changes his or her experiences into knowledge, skills, attitudes, values or emotions, and where the way people talk together and interact is a part of what is learned. Learning is then, as mentioned earlier, to acquire or appropriate discourses.

In higher education the students must relate to knowledge that is already developed. At the same time knowledge and learning is supposed to be shared in a community of practice. How the students collaborate in conversations may be seen as outlets of this sharing of experience and the negotiation of shared meaning and joint construction of knowledge within the context. Added to this is mastery of specific elements of knowledge concerning the field of special needs education; as shown by what is presented in the audio visual learning (TFA).

How is a technologically based learning material supposed to function to be productive when realized in this didactic and pedagogical context? Such a question brings us to assumptions about the potential power and effect of the technological learning resource on learning.

4.3.1 Technologic learning material: Potential power and effect on learning

"Every human tool relies upon, and reifies, some underlying conception of the activity that it is designed to support" (Suchman 1987/1994:3)

Learning tools and resources are used in all kinds of education to support and scaffold learning processes. The tools may be a blackboard, writing books, portfolios and content resources like text books or audio visual learning resources like film, video, etc. Audio visual learning resources represent qualities that in many ways are unique compared to other materials. This specifically involves these resources' multi modal⁶¹

⁶¹ An "embedded" text consisting of sound, photos, texts, films; where "reading" the text demands the use of several modalities; vision, hearing, perception, etc (Kress and van Leeuwen 2001).

character. In a combination of sound, photo and text, such digital learning resources may provide a richer representation of knowledge that lies closer to reality than text books. Living pictures may be the closest thing to an experience without participating directly. Films may open up to empathy, understanding, insight and knowledge. In this way complex objectives of learning may be made more accessible. The use of audio visual learning material in small collaborative groups may give the students access to more authentic social practices and discourses and this may enhance the learning process (Koschman 1996, Sorensen 1999/2002). This kind of perspective belongs to more recent social constructive learning theories. Interaction and collaboration between people within a cultural fellowship is central. According to theories of situated learning one may say that the *owners of the knowledge are the community* itself (Lave and Wenger 1991). To make conversation in a group may then be viewed as a means of learning through collaboration, where the students draw upon the experiences and competence of each other, but at the same time they create their own joint spaces of action and share discourses. This is learning *with* the technology as a resource, through the inter subjectivity of the students. The learning material (i.e. technology) has then the inherent possibility to front what has been called collaborative learning in educational literature (Koschman 1996). Focusing on the *effect of* an audio visual, video and task based learning material, there is also a possibility of changing the cognitive capacity in the students by interaction with the technology (Manovich 2001). Using video sequences from real educational settings in authentic contexts connected with professional topics, subjects, dilemmas and reflection assignments from within the field of special needs education may in a general and conceptual level give students a more real life approach than a traditionally mediated university lecture.

The opportunity that lies in visualizing and reflecting upon didactic, pedagogical and professionally relevant topics and phenomena may help the students to understand complex terms and subject areas. The learning material may simultaneously help to organize the learning activity and the social learning context (Kuutti 1996, Engeström 2001, Säljö 2006). This was exemplified in the text analysis, where the given

assignments (study questions) helped steer the conversations. The video material did however spark off spontaneous discussions not related to the topic questions. We may therefore make the assumption that learning with the material (AFL) happens in a productive, self generating and motivating way. The learning material gave its users the chance to explore and question their own presuppositions and assumptions. This may be shown in the discourse analysis for instance in those cases where agreement was reached. On other occasions the students kept to their previous opinions and understandings. This may show that the students were unable to “automatically” appropriate such discourses that went against the dominant discourse in their own culture.

The use of technology may also lead to lost learning opportunities. Tension will probably always exist between new technologies and the traditions of the educational institution. Tradition may be expressed through the disciplinary or professional culture, the discourses, teacher domination and the use of learning materials, but also through the learning materials themselves. A counter-assumption about the potentially positive effect of a technological learning material on learning may be that *the use of technology in education does not guarantee better or more learning*. By creating and implementing learning technology a will of new didactic thinking is necessary: “... if new technology shall give better learning, it must be followed up by a change in educational practice” (Fleksibel læring 2006:22, 161, see Koch 2006). This goes for learning theory awareness as well; the material must be used in ways that support learning processes. Earlier research has shown that many of the expectations one has had towards new technology in education have not been fulfilled, because the teachers (or lecturers) in practice are too “conservative” and reasonably stable over time (Cuban 1986, Bjørke 1998, Kvalbein 1998). Traditions in teaching die hard; teachers stick to traditional methods (van Dijk 1999:21). The teacher-centered model⁶² has so far dominated higher education (Skogen 1997). Critical voices argue that the use of information and computer technology (ICT) in

⁶² A transference modell of knowledge; containing class lectures, using the blackboard and giving speeches.

different forms is overrated ("oversold and underused" in Cuban 2001). In the practical implementation of the learning material it may be perceived as too demanding, too "immature" or not relevant enough when considering the users' practical and social everyday lives. Whether this will happen in connection with TFL will become clear with further use of the material in authentic educational settings.

Summary and implications

The analysis has shown how students jointly construct a common, contextual space of understanding and learning in their conversations. Even if the students had different personal experiences and discursive backgrounds, the learning material probably gave a *joint frame of reference* through what was perceived and experienced within the conversational fellowship. *One may conclude that the students created their own learning context with the support of the TFA-material.* This seems an important inference. What happens in the conversations is probably an expression of complex interrelations between cultures, individuals and discursive practices. What the students personally "actually" mean, or what we may call the "thought behind the utterances" is set aside because what is said by the participants is tied to *specific traits belonging to the specific situation or setting they are placed within.* This, on the other hand, is connected with societal contexts and culturally decided fields of knowledge. Through the conversations the students explore the social practices of their respective countries, and what is presented is weighed against "the ideal"; which means considering ways of thinking, in other words systems of discourse. The different comprehensions in the conversations that show differing discursive practice in the different cultures may lead to a questioning of the students' own perceptions and opinions. The learning material (TFL) generates not only conversations that are directly connected to the tasks and assignments given, but also such conversations that is tied to what has been seen in the video. This may be interpreted as a form of intertextuality and a frame of reference for comprehension. The comprehension then of the fields of knowledge may be constructed and articulated through the discourses within the conversations (ref. chapter 2), where the technological learning material may be a possible catalyst and factor of change. A learning material which uses video

film will carry meaning in several ways and will mirror the discourses of the culture it is being developed in. to be introduced to new perspectives, angles and discourses may lead to a *shaking of concepts*, where the new might be either appropriated or rejected. By what right such a learning material challenges other people's way of thinking is then an ethical question to ponder. On the other hand this is exactly what is meant to be challenged from a critical discourse analytical perspective: challenging discourses and criticism may be a source of enrichment and empowerment and a force that leads to change. The development of learning materials therefore demands awareness about any implicit and explicit ideological discourses and intercultural discursivity. This involves perspectives on learning, didactic considerations and an anchoring in learning theory as well as evaluations concerning profession, subject and knowledge. This in turn leads us towards a summary and a conclusion of this master thesis with an evaluation and a view towards new possible roads of research in the last chapter.

5. Conclusion: Summary and conclusions

"Not every end is the goal. The end of a melody is not its goal, and yet if a melody has not reached its end, it has not reached its goal." Friedrich Nietzsche (1844-1900) Fra "The Wanderer and His Shadow" (1880:204).

This chapter forms the closure and the end goal of this master thesis. Like Nietzsche (1880) states in the citation above, this chapter is still not the final objective. The chapter gives a short summary and makes tentative inferences and conclusions. Meta reflections on the research are taken into account, also giving a critical perspective. In closing the chapter some new roads appear within this field of study.

5.1 Summary, evaluation and tentative inferences

The topic of this master thesis has been conversations and the use of a technological learning material in Special Needs Education. The objective was to explore conversation as an interaction process through the following research question: *How do international master students at the University of Oslo negotiate knowledge and meaning in group conversations when a video and task based learning material on CD is implemented as a learning resource, what is negotiated and what may explain the interaction process?*

The analysis has shown that the learning material probably gives the students an opportunity to establish and negotiate "common ground"; a joint contextual and situational platform of understanding in the field of inclusion and visual impairment. The negotiations in the conversations involved agreement, non-agreement, language comprehension and conceptual content, ideological understanding and discursive content of meaning, as well as conveying cultural similarities and differences. Norms of politeness probably makes sure that non-agreements in the conversations do not lead to conflicts in those cases where agreement cannot be reached. From the text analysis we can observe that there are several movements and augmentations of the discourses. This is probably made feasible by the spaces of understanding that are

established through negotiation of meaning and knowledge as part of those learning and construction processes that conversations with AFL inspire. The analysis also gives information of how discourses may be rejected from the participants' points of view. In light of Mantovani's model (1996), we see that the social context possibly is present within the conversations as expressions of each person's culture individually, but also through the awareness of being in another culture, with other ideals and grounds for discourses. This also enters on the conversational level. Even if the students had different personal experiences, the learning material gave a joint frame of reference, through what was jointly experienced and the way they negotiated knowledge and meaning. The students probably created their own learning context by the support of the learning material (TFA) . This is believed to be the most important find of this study. From this one might infer in a tentative way that the learning material (TFA) is well suited to stimulate collaborative and reflection based conversations in similar settings. However, the knowledge that appeared in the conversations in the different groups was quite divergent and obviously anchored in the given situation. It might not be possible to reach the same conclusions in different settings. The results only give reason to form tentative, analogue and analytical generalizations about the learning material's effect on learning. The results need closer study in a whole range of settings and over time to have general application.

In the introductory chapter it was said that the use of and the effect of the technological learning resource must be understood within the learning activity's situational and societal context. Learning materials do not do the job alone! It is dependent on didactic premises and of the people using them. The use of audio visual learning resources and other technology in higher education constitutes and help construct discursive practice. When something is given importance other aspects will be marginalized and in relation to the learning material this means that the students are directed toward specific aspects of the discourses of visual impairment and inclusion. The learning material may in some ways be seen as an actor for the professional job culture you educate the students to and those discursive practices are given legitimacy. This will regulate what it is "allowed" to say and not, because discourses involve a repertoire of actions that legitimate the social practices. The

development and negotiation about knowledge and meaning may be seen as a question of learning to master the discourses. As regarding the field of special needs education one might say that the students develop their professional competence through relating, absorb, negotiate and develop those discourses that dominate the field of work that they want to partake in. What discourses (discourse practices) they are able to access and experience, are crucial. This is a question of how the learning material TFL gives the students access to the professional discourses and subject/disciplinary knowledge. It also depends on which paths of learning that are given validity through the spaces that are established for negotiation of knowledge and meaning. The use of the learning material may awaken the students to be responsible in terms of their own development of knowledge and to enter the work from their own competencies. Such a perspective exists within newer socio-constructive learning theory, which expresses that learning happens through interaction with others in a complex context, through dialogue and communication based collaboration. Collaborative work thus involves a construction of understanding through interaction with others. The most effective kind of learning is perhaps also the one that happens through socio-cognitive conflicts, opposing ideas and the awareness of the existence of contrasting discourses. Learning within this context is not only partaking in the field of special needs education with one's own knowledges and traditions, but it's also partaking in cultural meetings. An expanding or augmentation of the students' fields of discourse may happen in meeting other culturally determined discursive practices and experiences. This may produce an *augmented discursive action repertoire in the individual* student, and may also contribute to raising the problem of inclusion away from the individual's field of vision into an augmented sphere of understanding of social and cultural practice. Within the frame of understanding of this master thesis, the use of the learning material has probably contributed to such learning processes and knowledge sharing that is wanted, given the political, societal and global signals in higher education today, especially seen in the light of learning theories that uphold reflection, authentic learning contexts, collaboration and active knowledge construction as important. On the basis of the above, one may draw a tentative conclusion: The learning material

TFL is probably well suited as a learning resource in that it stimulates collaboration and reflection in conversations in the situations that have been examined. Learning with the learning material as assumed to happen in a productive, self generating and motivating way. A visual representation of a reality that springs from practice, collaboration and reflection gives the users of the learning material opportunities to mediate and share discourses of knowledge, and this may support a multicultural learning text with room for many “voices”.

5.2 Meta-reflection: A critical view and roads ahead

While working on this thesis one of the experiences has been that discourse analysis gives a set of concepts and an analytic tool that may be useful for analyzing language in use. Such knowledge may be expedient in a cross-disciplinary perspective, because shows structures of power in language and provides awareness of how the world may be comprehended from several different positionings. Discourse analysis may unfold relatively detailed maps of relatively complex learning processes. To this effect this method of analysis may be a tool for educational research. A critical view of this master thesis reveals that discourse analysis is dependent on the person making it; and as such the analysis is dependent on the researcher’s reflexivity and knowledge of the different discourses that exist in the field that is analyzed. As a reader and interpreter one always holds a perspective. There is a chance, therefore, that this analysis says more about the researcher’s own stereotype conceptions than what exists in the text. This may weaken the credibility of the research. Another limitation may be found in the critical interpretations that “automatically” spring forth through using critical discourse analysis as a tool and approach. Critical discourse analysis has been criticized for being too descriptive and not objective enough. This might also be said about this master study research. In a constructivist perspective it is the researcher that analytically constructs discourses, and one might say that discourses as such do not “exist” in reality. As a master student and a novice to this kind of research one is humble both when it comes to method and validation. There is always the question whether or not one has managed to recognize what is central to the research question.

In this master thesis several aspects have been presented, and this may be a problem when the need might be to delve deeper into processes. Time and extensiveness of study give strict boundaries. A limitation of discourse analysis as a method lies in the fact that it is time- and work consuming, much because transcription and analysis are crucial in handling raw data.

Discourse analysis is however, a way of structuring data that may give a lot of information that may be used as feedback into the production of the learning resource, even if only small extracts of the text as a whole have been thoroughly analyzed. What gets chosen as a basis for further analysis may point to new choices when developing audio visual learning materials, but also such choices that need to be made in terms of pedagogy and didactic evaluations when implementing the material. The demand for specific subject-related knowledge must be weighed against the need for reflection tasks and assignments that open up to meta-cognitive competencies when it comes to developing the learning material further.

Challenges may in general be concerned with the learning material's learning design and content as well as visual design. Specific research questions may for instance involve how students' comprehensions relate to the way the learning material asks its questions and the way the assignments relate to the film sequences. This may concern whether the questions are open or closed, and in which way words, discourses, learning and knowledge categories are used and represented.

In the light of newer theories of researching texts, one question stands out as a new focus of interest: How may the audio visual, flexible learning material "Teachers for All" be evaluated as a multimodal educational text? This last aspect points to challenges relating to how the learning material will be realized as a finished text (a product) in educational and didactic contexts. As a final conclusion Gavriel Salomon (2000:net page) therefore gets the last word:

"Education is far too important to society to be wiggled by a technological tail. Let technology show us what can be done, and let educational considerations determine what will be done in actuality."

Bibliography

- Alant, Lise, Engan, Bengt, Otnes, Hildegunn, m.fl. (2003) *Samhandling med, foran og via skjermen. Småskoleeleven på vei mot digital kompetanse*. Oslo, Forsknings og kompetansenettverk for IT i utdanning.
- Alexandersson, Jan, Ask, Bodil, Jamissen, Grete, m.fl. (2001) SOFF - Sentralorganet for fleksibel læring i høgre utdanning, Tromsø.
- Allern, Marit Kristin (2005) *Individuell eller kollektiv læringsprosess? Mappevurdering i praktisk-pedagogisk utdanning*. Universitetet i Tromsø.
- Arnseth, Hans Christian (2000) Resonnering i interaksjon. I: *Ny teknologi - Nye praksisformer*, red.: Ludvigsen, S. & Østerud, S., Oslo, Pedagogisk forskningsinstitutt, Universitetet i Oslo.
- Artefakt (av lat. ars=kunst og facere=gjøre, lage) *Et kunstprodukt, noe som ikke er framstilt av naturen, men laget av mennesker* [internett] Tilgjengelig fra: <http://www.caplex.no/Web/ArticleView.aspx?id=9300418> [lest 18.03.07]
- Austin, J. L (1962) *How to do things with words*. Oxford, Oxford University Press.
- Bachmann, Kari & Haug, Peder (2006) *Forskning om tilpasset opplæring* [internett] Tilgjengelig fra: http://www.utdanningsdirektoratet.no/upload/Forskning/Tilpasset_opplaring.pdf [lest 12.04.07]
- Bakhtin, Mikhail M (1981) Discourse in the novel. I: *The dialogic imagination: four essays by M.M. Bakhtin*, red.: Holquist, I. M., Austin, University of Texas Press.
- Bakhtin, Mikhail M (1984) *Problems of Dostoevski's Poetics*. Minneapolis, University of Minnesota Press.
- Bakhtin, Mikhail M (1991) *Det dialogiska ordet*. Gräbo, Anthropos Forlag.
- Bjørke, Gerd (1998) Ei ny lærarrolle?: frå tradisjonell førelæring til problembasert læring. I: *Studiekvalitet- erfaringer og utfordringer i profesjonsutdanninger*, red.: Håberg, K. R. & Ålvik, T., Oslo, Høgskolen i Oslo.
- Boud, David & Feletti, I (1997) Changing Problem-based Learning. I: *The Challenge of Problem-based Learning, PBL*, red., 1-15. London.
- Boud, David, Keough, Rosemary & Walker, David (1985) *Reflection: Turning Experience into Learning*. London, Kogan Page.
- Bourdieu, Pierre (1996) *Symbolisk makt*. Oslo, Pax Forlag.
- Bruffee, Kenneth A (1993) *Collaborative Learning. Higher Education, Interdependence, and the Authority of Knowledge*. Baltimore and London, The Johns Hopkins University Press.
- Bruner, Jerome (1993) Do we "acquire" culture or vice versa? I: *Behavioral and Brain Science* Vol. 16, red., 515-516. Cambridge, Cambridge University Press.
- Bruner, Jerome (1996/97) *Utdanningskultur og læring*. Oslo, Ad Notam Gyldendal.
- Bruner, Jerome & Al, Et (1966) *Studies in Cognitive Growth*. New York.
- Clark, Herbert C (1996) *Using language*. New York, Melbourne, Cambridge University Press.
- Cole, Michael (1996) *Cultural Psychology: A once and future discipline*. Cambridge,

-
- Massachusetts and London, England, The Belknap Press of Harvard University Press.
- Cuban, Larry (1986) *Teachers and Machines: The Classroom Uses of Technology Since 1920*. New York, Teachers College Press.
- Cuban, Larry (2001) *Oversold and underused: computers in the classroom*. Cambridge, Mass., Harvard University Press.
- Dalen, Monica (2006) *Så langt det er mulig og faglig forsvarlig*. Oslo, Gyldendal norsk forlag.
- Dialog (se for eksempel Caplex) [internett] Tilgjengelig fra:
<http://www.caplex.no/Web/ArticleView.aspx?id=9321299> [lest 18.03.07]
- Djupedal, Øystein (2006) *Inkluderende skole – politiske visjoner* [internett]
 Tilgjengelig fra:
http://www.regjeringen.no/nb/dep/kd/dep/Kunnskapsminister_Oystein_Kare_Djupedal_/taler_artikler/2006/Inkluderende-skole---politiske-visjoner.html?id=113958 [lest 28.03.06]
- Dysthe, Olga (1996) "Læring gjennom dialog" - kva inneber det i høgare utdanning? I: *Ulike perspektiv på læring og læringsforskning*, red.: Dysthe, O., Oslo, Cappelen Akademisk Forlag.
- Dysthe, Olga (1999) *Ulike teoriperspektiv på kunnskap og læring* [internett].
 Tilgjengelig fra: <http://munin.hsh.no/lu/ped/dyste.doc> [lest 06.09.06]
- Dysthe, Olga (2003) *Mapper som pedagogisk redskap. Perspektiver og erfaringer*. Oslo, abstrakt forlag.
- Dysthe, Olga & Engelsen, Knut Steinar (2003) *Mapper som pedagogisk redskap*. Oslo, abstrakt forlag.
- Edwards, Derek (1997) *Discourse and Cognition*. London, Sage
- Edwards, Derek & Mercer, N (1987) *Common Knowledge: the development of joint understanding in the classroom*. London, Methuen.
- Edwards, Derek & Potter, Jonathan (1992) *Discursive Psychology*. London, Sage Publications.
- Ekeberg, Toril Rønsen & Holmberg, Jorun Buli (2001) *Tilpasset opplæring og spesialpedagogisk arbeid i skolen*. Oslo, Universitetsforlaget.
- Ekeberg, Toril Rønsen & Holmberg, Jorun Buli (2004) *Tilpasset og inkluderende opplæring i en skole for alle*. Oslo, Universitetsforlaget.
- Engeström, Yngve (1987) *Learning by expanding*. Helsinki, Orienta-Konsultit Oy.
- Engeström, Yngve (2001) Expansive learning at work: toward an activity theoretical reconceptualization. *Journal of Education and Work*, 14, , no 1.
- Erstad, Ola (2003) *Piloter for en ny skole. Rapport fra forskningen i Pilot 2000-2003*. Oslo, ITU.
- Etnografi [internett] Tilgjengelig fra:
<http://www.caplex.no/Web/ArticleView.aspx?id=9309687> [lest 10.04.07]
- Fairclough, Norman (1992) *Discourse and Social Change*. Cambridge, Polity Press.
- Fairclough, Norman (1995) *Critical discourse analysis: The critical study of language*. London, Longman.
- Fairclough, Norman (1999) Linguistic and Intertextual Analysis within Discourse Analysis. I: *The Discourse Reader*, red.: Jaworski, A. & Coupland, N., London, New York, Routledge.

- Fairclough, Norman (2006) *Language and Globalization*. New York, Routledge.
- Firth, A (1995) *The Discourse of negotiation: studies of language in the workplace*. Oxford, Elsevier Science.
- Fleksibel-Læring Program for fleksibel læring [internett] Tilgjengelig fra: <http://www.uv.uio.no/fleksibel-laering/2006/Refleksjonsutfordringer/Innhold.html> [lest 22.02.07]
- Foucault, M (1970) *Diskursens orden*. Oslo, Spartacus forlag.
- Foucault, M (1972) *Vetandets arkeologi*. Staffanstor, Bo Cavefors Bokförlag.
- Foucault, M (1999) *Diskursens orden*. Oslo, Spartacus forlag.
- Foucault, Michel (2006) *Galskapens historie*. Trondheim, Gyldendahl.
- Fuglseth, Kåre & Skogen, Kjell (red.) (2006) *Masteroppgaven i pedagogikk og spesialpedagogikk DESIGN OG METODER*. Oslo, Cappelen Akademisk Forlag.
- Garfinkel, H & Sacks, Harvey (1970) Of formal structures of practical actions. I: *Theoretical Sociology*, red.: McKinney, J. & Tiryakian, E., 342-4. New York, Appleton-Century-Crofts.
- Geertz, Clifford (1973) Thick Description: Toward an Interpretative Theory of Culture. I: *The Interpretation of Cultures*, red., New York, Basic Books.
- Giddens, Anthony (1984) *The Constitution of Society: Outline of the Theory of Structuration*. Cambridge, Polity/Basil Blackwell.
- Giddens, Anthony (1991) *Modernity and Self-Identity. Self and Society in Late Modern Age*. Cambridge, Polity Press.
- Goffman, Erving (1959) *Presentations of Self in Everyday Life*. N. Y., Doubleday Anchor.
- Goffman, Erving (1999) On Face-work: An Analysis of Ritual Elements in Social Interaction. I: *The Discourse Reader*, red.: Jaworski, A. & Coupland, N., 306ff (Jaworski og Coupland 1999). London, Routledge.
- Goodwin, C (1981) *Conversational Organisation: Interaction Between Speakers and Hearers*. New York, Academic Press.
- Goodwin, Charles & Heritage, John (1990) Conversation Analysis. *Annual Review of Psychology*, 19 283-307.
- Grabinger, S (1996) Rich environments for active learning. I: *Handbook of research for educational communications and technology*, red.: Jonassen, D. H., New York, Macmillan Library Reference.
- Grice, H.P (1999) Logic and Conversation. I: *The Discourse Reader*, red.: Jaworski, A. & Coupland, N., London Routledge.
- Gumperz, John (1999) Sociocultural Knowledge in Conversational Interference. I: *The Discourse Reader*, red.: Jaworski, A. & Coupland, N., 98 ff. London, Routledge.
- Hall, James W (u.å) *The educational paradigm shift: Implications for ICDE and the distance learning community* [internett] Tilgjengelig fra: <http://www.acom.edu.au/library/sqldownload.php?id=edparshift> [lest 27.04.07]
- Haugsbakk, Geir (2002) Møtet med ny teknologi - om læringsperspektiver og utdanningspolitikk. I: *Fleksibilitet som utfordring - noen erfaringer og refleksjoner*, red.: Fritze, Y., Haugsbakk, G. & Rønning, R., Tromsø, SOFF-

- rapport nr. 1/2002.
- Havnes, A (1997) *Agency in learning: a case study of learning at the university*. Universitetet i Oslo.
- Hongyu, She (2007) *Training courses for teachers of the blind in Western China* [internett] Tilgjengelig fra: <http://www.amityfoundation.org/page.php?page=1447> [lest 14.4.07]
- Hutchins, E. (1995) *Cognition in the Wild*. Cambridge, MA, The MIT Press.
- Jarvis, Peter (1993) *The Learning Process and Late Modernity*. *Scandinavian Journal of Educational Research*.
- Jaworski, Adam & Coupland, Nikolas (red.) (1999) *The Discourse Reader*. London, Routledge.
- Jefferson, G (1984) Transcription Notation. I: *Structures of Social Interaction*, red.: Atkinson, J. H., J, New York, Cambridge University Press.
- Jordheim, Helge (2001) *Lesningens vitenskap. Utkast til en ny filologi*. Oslo, Universitetsforlaget.
- Jørgensen, Marianne Winther & Phillips, Louse (2006) *Diskursanalyse som teori og metode*. Roskilde, Roskilde Universitetsforlag.
- Kalleberg, Ragnvald (red.) (2005) *Forskningsetiske retningslinjer for samfunnsvitenskap, humaniora, juss og teologi*. Oslo, NESH.
- Kendon, Adam (2004) The negotiation of context in face-to-face interaction. I: *The Discourse Reader*, red.: Jaworski, A. & Coupland, N., London og New York, Routledge.
- Knain, Erik (1999) Naturfagets tause stemme. Diskursanalyse av lærebøker for Natur og miljøfag i et allmenndannelsesperspektiv. *Avhandling for graden dr. scient og Norsk Sakprosa*.
- Koch, Susanne Kjekshus (red.) (2006) *Ringer i vann. Fleksibel læring - Kvalitetsreformen i praksis*. Oslo, Universitetet i Oslo.
- Kontekst (2007) [internett] Tilgjengelig fra: <http://www.caplex.no/Web/ArticleView.aspx?id=9319150> [lest 8.april 2007]
- Koschman, Timothy (red.) (1996) *Paradigm shifts and instructional technology: an introduction*. New Jersey, Lawrence Erlbaum Associates inc.
- Kress, Gunther & Van Leeuwen, Theo (2001) *Multimodal Discourse The Modes and Media of Contemporary Communication*
- Kristeva, Julia (1986) Word, dialogue, and the Novel. I: *The Kristeva Reader*, red.: Moi, T., New York, Columbia University Press.
- Kuutti, Kari (red.) (1996) *Activity theory as a Potential Framework for Human-Computer Interaction*. Cambridge, MA, MIT Press.
- Kvalbein, I. A (1998) Allmennlærerutdanning som møter mellom "moderne" lærere og "postmoderne" studenter. *Norsk Pedagogisk Tidsskrift*, 4-5/98, 252-259.
- Kvale, Steinar (1997) *Det kvalitative forskningsintervju*. Oslo, ad Notam Gyldendal.
- Lambert, Susan & Williams, Rhys (1999) In *HERDSA Annual International Conference* Melbourne.
- Langdridge, Darren (2006) *Psykologisk forskningsmetode En innføring i kvalitative og kvantitative tilnærminger*. Trondheim, tapir akademisk forlag.
- Latour, Bruno (1999) On Recalling ANT. I: *Actor Network Theory and After*, red.: Law, J. & Hassard, J., Oxford, Blackwell Publishers.

-
- Laurillard, D (1993) *Rethinking University Teaching: A Framework for the Effective Use of Educational Technology*. New York, Routledge.
- Lauvås, Per & Handal, Gunnar (1990) *Veiledning og praktisk yrkesteori*. Oslo, J.W. Cappelen Forlag.
- Lave, Jean & Wenger, Etienne (1991) *Situated learning - Legitimate peripheral participation*. New York, Cambridge University Press.
- Leont'ev, D.A (1981) The problem of activity in psychology. I: *The concept of activity in Soviet psychology*, red.: Wertsch, J. V., Armonk, N.Y., M.E. Sharpe Inc.
- Lie, Ivar (1986) *Syn og synsproblemer*. Oslo Universitetsforlaget.
- Linell, P & Gustavsson, L (1987) *Initiativ og respons. Om dialogens dynamik, dominans og koherens*. Linköping, Universitetet i Linköping.
- Linell, Per (1994) *Approaching dialogue. Talk, interaction and contexts in dialogical perspectives*. Amsterdam/Philadelphia, John Benjamins Publishing Company.
- Linell, Per (1998) *Approaching Dialogue. Talk, Interaction and Contexts in Dialogical Perspectives*.
- Lomax, H & Casey, N (1998) Recording Social Life: Reflexivity and Video Methodology. *Sociological Research Online* lesedato 16 mars 2007, 3, 2.
- Ludvigsen, Sten R. & Flo, C.F (2002) Innovasjon i lærerutdanningen: Hvordan skapes endring. I: *Et utdanningssystem i endring. IKT og læring*, red.: Hoel, T. L., Oslo, Gyldendal.
- Ludvigsen, Sten R. & Hoel, Torlaug Løkensgaard (2002a) *Et utdanningssystem i endring. IKT og læring*. Oslo, Gyldendal Akademisk.
- Ludvigsen, Sten R. & Hoel, Torlaug Løkensgaard (2002b) Når vilkårene for læring endres. I: *Et utdanningssystem i endring IKT og læring*, red.: Hoel, T. L., Oslo, Gyldendal akademisk.
- Ludvigsen, Sten R. & Østerud, Svein (2000) *Ny teknologi - nye praksisformer*. Oslo, Pedagogisk Forskningsinstitutt Universitetet i Oslo.
- Lytard, J. -F. (1984) *The Postmodern Condition: A report on Knowledge*. Manchester, Manchester University Press.
- Manovich, Lev (2001) *The Language of New Media*. MIT Press.
- Mantovani, Guiseppe (1996) *New Communication Environments. From Everyday to Virtual*. London, Taylor and Francis.
- Mantovani, Guiseppe (2001) *Exploring borders: understanding culture and psychology*. London, Routledge.
- Mercer, Neil (1995) *The Guided Construction of Knowledge: Talk amongst Teachers and Learners*. Clevedon, Multilingual Matters
- Mercer, Neil & Wegerif, R (1999) Is "exploratory talk" productive talk? I: *Learning with computers. Analyzing productive interaction*, red.: Littleton, K. & Light, P., London, New York, Routledge.
- Nardi, Bonnie A (1997) Activity Theory and Human-Computer Interaction. I: *Context and Consciousness. Activity and Human-Computer Interaction*, red.: Nardi, B. A., Cambridge, Mass., MIT Press.
- Ongstad, Sigmund (2003) *Språk, kommunikasjon og didaktikk*. Bergen, Fagbokforlaget Vigmostad & Bjørke AS.

-
- Opplæringsloven (2007) *Lov om grunnskolen og den vidaregåande opplæringa* [internett] Tilgjengelig fra: <http://www.lovdato.no/all/nl-19980717-061.html> [lest 15.04.07]
- Otnes, Hildegunn (2004) IKT og nye læreprosesser. *Artikkelsamling Høgskolen i Vestfold*, Notat 2.
- Pea, Roy D (1992a) Augmenting the Discourse of Learning with Computer-Based Learning Environments. I: *Computer-Based Learning Environments and Problem Solving*, red.: deCorte, E., Linn, M. & Verschaffel, L., New York, Springer-Verlag.
- Pea, Roy D (1992b) Distributed Multimedia Learning Environments: Why and How? *Interactive Learning Environments*, 2, 2, 73-109.
- Pea, Roy D (1993) Learning scientific concepts through material and social activities: Conversational analysis meets conceptual change. *Educational Psychologist*, 28, 3.
- Pea, Roy D (1996) Seeing What We Build Together: Distributed Multimedia Learning Environments for Transformative Communications. I: *CSCL: Theory and Practice of an emerging paradigm*, red.: Koschman, T., New Jersey, Lawrence Erlbaum Associates Inc.
- Pettersen, R.C (1997) *Problemet først: problembasert læring som pedagogisk ide og strategi*. Oslo, Tano/Aschehoug.
- Polyani, Michael (1966) *The Tacit Dimension*. London, Routledge and Kegan Paul.
- Potter, Jonathan (1996) Discourse Analysis and Constructionist Approaches: Theoretical Background. I: *Handbook of qualitative research methods for psychology and the social sciences*, red.: Richardson, J. T. E., Leicester, BPS Books.
- Quortrup, Lars (2001) *Det lærende samfunn*. København, Gyldendal.
- Rogoff, Barbara (1990) *Apprenticeship in thinking - Cognitive Development in Social Context*. New York, Oxford University Press Inc.
- Rommetveit, Ragnar (1992) Outline of a dialogically based socio-cognitive approach to human cognition and communication. I: *The dialogic alternative: Towards a theory of language and mind*, red.: Wold, A. H., 19-44. Oslo, Scandinavian University Press.
- Rommetveit, Ragnar (1996) Læring gjennom dialog. Ei sosiokulturell og sosiokognitiv tilnærming på kunnskap og læring. I: *Ulike perspektiv på læring og læringsforskning*, red.: Dysthe, O., Oslo, Cappelen akademisk forlag.
- Røste, Ingvild (2006) *Kommunikasjon i en afasigruppe - en samtaleanalytisk tilnærming*. Universitetet i Oslo.
- Salomon, G. (red.) (1993) *Distributed Cognitions. Psychological and Educational Considerations*. Cambridge, Cambridge University Press.
- Salomon, Gavriel (1992) What does the design of effective CSCL require and how do we study its effects? *SIGCUE Outlook, Special Issue on CSCL*, 21, 3, 62-68.
- Salomon, Gavriel (2000) *It's not just the tool, but the educational rationale that counts* [internett] Tilgjengelig fra: <http://www.aace.org/conf/edmedia/00/salomonkeynote.htm> [lest 28.04.07]
- Scardamalia, M & Bereiter, C (1994) Computer Support Knowledge for Building Communities. *The Journal of the Learning Sciences*, 3, 3, 265-283.

-
- Schlegoff, E. A. (1999) Talk and Social Structure. I: *The Discourse Reader*, red.: Jaworski, A. & Coupland, N., London Routledge.
- Schlegoff, E. A. & Sacks, Harvey (1999) Opening up closings. I: *The Discourse Reader*, red.: Jaworski, A. & Coupland, N., London, Routledge.
- Schön, Donald A. (1983) *The Reflective Practitioner. How professionals think in action*. USA, Basic Books.
- Scollon, Ron & Scollon, Suzanne Wong (2001) *Intercultural communication*. Oxford, Melbourne, Berlin and Malden, MA., Blackwell Publishing.
- Seim, Inger Margrethe Hvenekilde (2006) *Identitet og etnisitet i samtale En analyse av innhold og struktur i en samtale mellom to ungdommer i et flerkulturelt miljø i Oslo*. Universitetet i Oslo.
- Selander, Staffan & Skjeltbred, Dagrun (2004) *Pedagogiske tekster for kommunikasjon og læring*. Oslo, Universitetsforlaget.
- Signo (2005) *Selvrespekt med eget språk* [internett] Tilgjengelig fra: <http://www.signo.no/Meny/Prosjekter/Kina/SigAmAvisMail.pdf> [lest 14.04.07]
- Silverman, D (2001) *Interpreting Qualitative Data. Methods for Analysing Talk, Text and Interaction*. London, Sage Publications Ltd.
- Silverman, D (2005) *Doing Qualitative Research. A practical handbook*. London, Sage Publications Ltd.
- Sjøvoll, Jarle (2006) Evaluering. I: *Masteroppgaven i pedagogikk og spesialpedagogikk. Design og metoder*, red.: Skogen, K. & Fuglseth, K., Oslo, Cappelen Akademisk forlag.
- Skogen, Kjell (1997) Bruk av diskusjonsundervisning i utdanningen av lærere. *Norsk pedagogisk tidsskrift*, 3, 122-130.
- Skogen, Kjell (2005) *Spesialpedagogikk En innføring*. Oslo, Universitetsforlaget.
- Skogen, Kjell (2006) Case-forskning. I: *Masteroppgaven i pedagogikk og spesialpedagogikk*, red.: Fuglseth, K., Oslo, Capelen akademisk forlag.
- Skogen, Kjell & Holmberg, Jorun Buli (2002) *Elevtilpasset opplæring. En innovasjonstilnærming*. Oslo, Aschehoug.
- Sorensen, Elsebeth K (1999/2002) *Intellectual Amplification through Reflection and Didactic Change in Distributed Collaborative Learning* [internett]. Tilgjengelig fra: <http://www.kommunikation.aau.dk/ansatte/es/publikationer/collaborative.pdf> [lest 10. oktober 2006]
- Stochholm, Keld (2005) *Vejen til blind forståelse*. Videntcenter for Synshandicap, Synscenter Refsnæs.
- Suchman, L.A. (1987/1994) *Plans and situated actions: the problem of human-machine communication*. Cambridge, Cambridge University Press.
- Svennevig, Jan (2001) *Språklig samhandling Innføring i kommunikasjonsteori og diskursanalyse*. Oslo, LNU/Cappelen akademisk forlag.
- Säljö, Roger (1999) Kommunikation som arena för handling - lärande i ett diskursivt perspektiv. I: *Textanalys. Introduktion til syftesrelaterad kritik*, red.: Säfström, C. A. & Östman, L., Lund, Studentlitteratur.
- Säljö, Roger (2000) *Lärande i praktiken. Ett sociokulturelt perspektiv*. Stockholm, Bokförlaget prisma.

- Säljö, Roger (2001) *Læring i praksis. Et sosiokulturelt perspektiv*. Oslo, Cappelen Akademisk forlag.
- Säljö, Roger (2006) *Læring og kulturelle redskaper : om læreprosesser og den kollektive hukommelsen*. Oslo, Cappelen akademisk.
- Säljö, Roger, Riesbeck, Eva & Wyndhamn, Jan (2001) Samtal, samarbeide och samsyn: En studie av koordination av perspektiv i klassrumskommunikation. I: *Dialog, samspel og læring*, red.: Dysthe, O., Oslo, Abstract forlag.
- Søndergaard, Dorte Marie (1996) Social konstruktionisme – et grundlag for at se kroppen som Tegn. *Sosiologi i dag*, 4, 5-31.
- Ten Have, P (1999) *Doing Conversation Analysis. A practical guide*. London, Sage Publications Ltd.
- Tjeldvoll, Arild (2005) *Skolekvalitet i Hong Kong* [internett] Tilgjengelig fra: <http://www.adressa.no/meninger/kronikker/article597230.ece> [lest 14.04.07]
- Tønnesson, Johan L (2001) Vitenskapens stemmer. *Norsk Sakprosa*.
- Tøssebro, Jan (red.) (2004) *Integrering og inkludering*. Lund, Studentlitteratur.
- Ufd (2001) *St.meld nr. 27(2000-2001) Kvalitetsreformen Om ny lærerutdanning*.
- Ufd (2002) *St. meld. nr.16(2001-2002) Gjør din plikt - Krev din rett. Kvalitetsreform av høyere utdanning* Utdannings- og forskningsdepartementet
- Unesco (2005) *Guidelines for inclusion. Ensuring Access to Education for All* [internett] Tilgjengelig fra: <http://unesdoc.unesco.org/images/0014/001402/140224e.pdf> [lest 15.04.07]
- Van Dijk, Teun (1997) Discourse As Structure and Process I: *Discourse Studies : A Multidisciplinary Introduction* Vol. 2, red.: Van Dijk, T., London, Sage Ltd.
- Van Dijk, Teun (1998) Opinions and Ideologies in the Press. I: *Media Discourse*, red.: Bell, A. & Garrett, P., Malden, Mass., Blackwell.
- Van Dijk, Teun (1999) *The Network Society*. London Sage.
- Van Dijk, Teun (2001) Principles of Critical Discourse Analysis. I: *Discourse theory and Practice: A Reader*, red.: Wetherell, M. e. a., London.
- Vygotsky, Lev S (1978) *Mind in Society. The Development of Higher Psychological Processes*. Cambridge Mass., Harvard University Press.
- Wasson, Barbara & Ludvigsen, Sten (2003) *Designing for Knowledge Building*. Oslo, Forsknings- og kompetansenettverk for IT i utdanning (ITU).
- Wertsch, James V. (1990) *Voices of the mind: A sociocultural Approach to Mediated Action*.
- Wertsch, James V. (1998) *Mind as Action*. Cambridge, MA, Harvard University Press.
- Wertsch, James V., Del Rio, P & Alvarez, A (1995) *Sociocultural Studies of Mind*. Cambridge University Press.
- Wittek, Line (2004) *Læring i og mellom mennesker*. Oslo, Cappelen Akademisk forlag.
- Wormnæs, Siri (2006) Informasjon om "Teachers for All", personlig kommunikasjon, Oslo.
- Yin, Robert K. (2003) *Case study research. Design and methods*. . California, Sage Publications. (Applied social research series)




Attachments

No 1, Gail Jeffersons principles for notation

Main principles for notation based on English orthography, comma used to mark natural breaks. Micro pauses marked as (.). Non-verbal activity is marked by double parentheses (()) the symbol \propto used when voice is lowered. Overlapping speech is marked with []. (...) means that it is not possible to understand the utterance. Stress on words is underlined. Other markings are understood as follows:

Transcript Notation

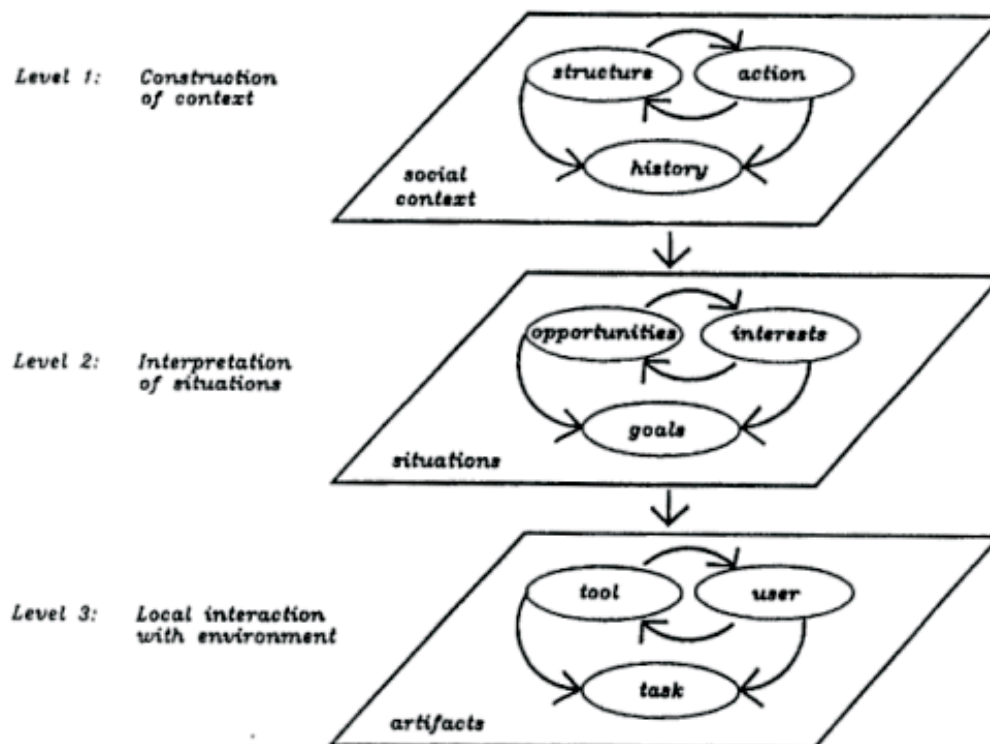
Jeffersonian Transcription Notation includes the following symbols:

Symbol	Name	Use
[text]	Brackets	Indicates the start and end points of overlapping speech.
=	Equal Sign	Indicates the break and subsequent continuation of a single utterance.
(# of seconds)	Timed Pause	A number in parentheses indicates the time, in seconds, of a pause in speech.
(.)	Micropause	A brief pause, usually less than 0.2 seconds.
↓ or 	Period or Down Arrow	Indicates falling pitch or intonation.
↑ or 	Question Mark or Up Arrow	Indicates rising pitch or intonation.
,	Comma	Indicates a temporary rise or fall in intonation.
-	Hyphen	Indicates an abrupt halt or interruption in utterance.
>text<	Greater than / Less than symbols	Indicates that the enclosed speech was delivered more rapidly than usual for the speaker.
<text>	Less than / Greater than symbols	Indicates that the enclosed speech was delivered more slowly than usual for the speaker.
◦	Degree symbol	Indicates whisper, reduced volume, or quiet speech.
ALL CAPS	Capitalized text	Indicates shouted or increased volume speech.
<u>underline</u>	Underlined text	Indicates the speaker is emphasizing or stressing the speech.
...	Colon(s)	Indicates prolongation of a sound.
(hhh)		Audible exhalation
• or 	High Dot	Audible inhalation
(.hhh)		
(text)	Parentheses	Speech which is unclear or in doubt in the transcript.
((<i>italic text</i>))	Double Parentheses	Annotation of non-verbal activity.

Jeffersonian Transcription Notation is described in G. Jefferson, *Transcription Notation*, in J. Atkinson and J. Heritage (eds), *Structures of Social Interaction*, New York: Cambridge University Press, 1984.

Attacchement 2, Figure 1: Guiseppe Mantovani's model

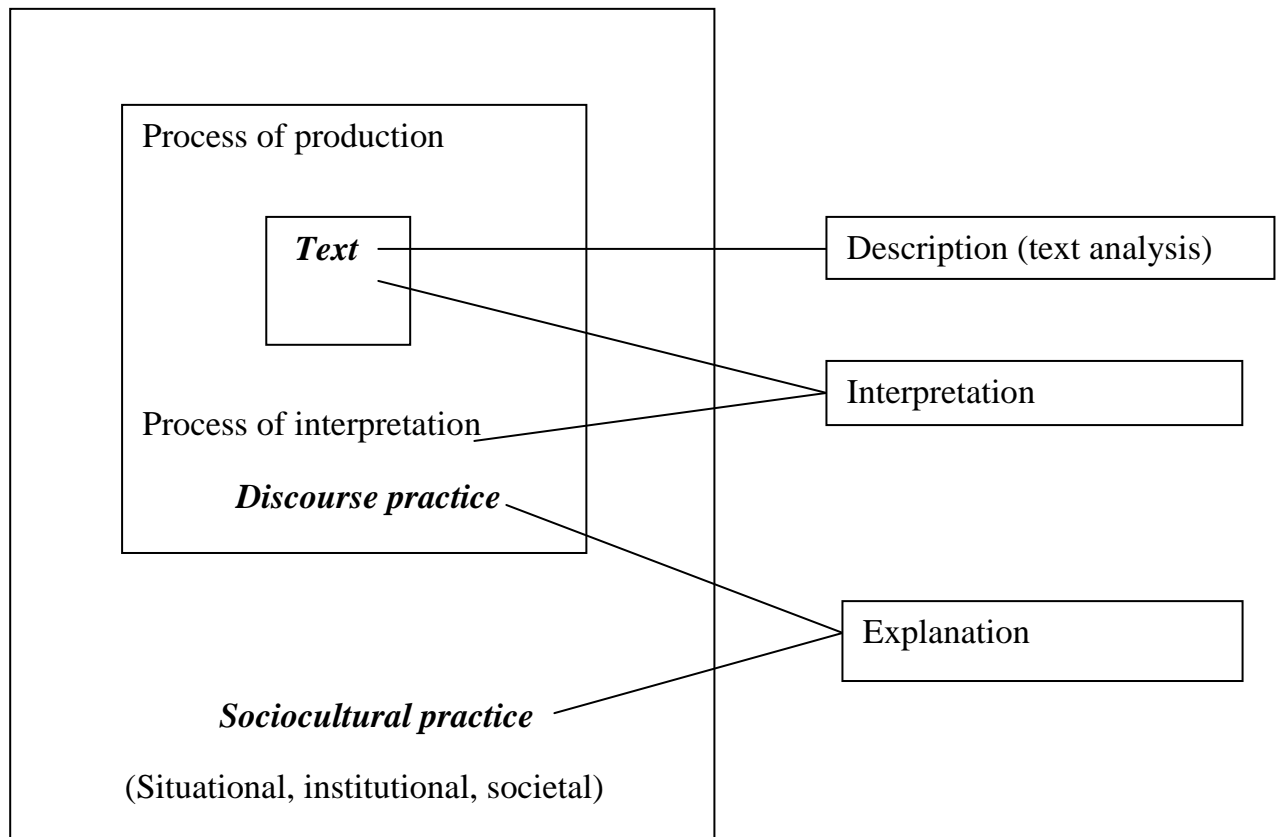
Mantovani's model of social context (Mantovani 1996:56ff):



Attachement 3, figure 2: Norman Fairclough's model

Fairclough's discourse analytical model

(Fairclough 1995:98)



Dimensions of discourse

Dimensions of discourse analysis